Opti-cal Survey Equipment Ltd is a Fully Accredited Authorised Leica Geosystems Distributor and Service Partner.

Sales • Hire • Repair

Reading Office
Opti-cal Survey Equipment Ltd • Orpheus House • Calleva Park
Aldermaston • Reading • RG7 8TA
Tel: 01189 820 500
Fax: 01189 820 509 • sales@surveyequipment.com

Gatwick Office
Opti-cal Survey Equipment Ltd • Unit 3 • The Pavilions
Brighton Road • Pease Pottage • Crawley • RH11 9BJ
Tel: 01293 526 488 • sales@surveyequipment.com

Milton Keynes Office
Opti-cal Survey Equipment Ltd • Field Barn • Plum Park Estate
Watling Street • Paulerspury • Towcester • NN12 6LG
Tel: 01327 811 008
Fax: 01327 813 201 • sales@surveyequipment.com
About Opti-cal

About Opti-cal Survey Equipment Ltd
Opti-cal Survey Equipment Ltd is a Fully Accredited Authorised Leica Geosystems Distributor & Service Partner and supplies precision measurement technology to the surveying and engineering industries. The company sell, hire and service new and re-conditioned land survey and laser equipment and provide training and support.

Over the years Opti-cal Survey Equipment Ltd have invested heavily in workforce and is now home to some of the most experienced and highly-trained service technicians in the country. With the acquisition of Swift Surveying Services in 2007 the company doubled its workforce and opened a new service facility at its second office at Pease Pottage, Crawley, near Gatwick. This service centre also provides the latest test software and test equipment enabling an extremely high standard of work to be carried out. In July 2010 they further expanded by opening a third office and service facility near Milton Keynes.

The company’s reputation has recently expanded into Europe and further afield which has further supported the company’s growth.

VAT Registration No. GB891610027
Company Registration No. 06246981

About Leica Geosystems
With close to 200 years of pioneering solutions to measure the world, Leica Geosystems products and services are trusted by professionals worldwide to help them capture, analyse, and present spatial information. Leica Geosystems is best known for its broad array of products that capture accurately, model quickly, analyse easily, and visualize and present spatial information.

Those who use Leica products every day trust them for their dependability, the value they deliver, and the superior customer support. Based in Heerbrugg, Switzerland, Leica Geosystems is a global company with tens of thousands of customers supported by more than 3,500 employees in 28 countries and hundreds of partners located in more than 120 countries around the world.
## Contents

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>PAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>About Opti-cal</td>
<td>3</td>
</tr>
<tr>
<td>How to Order</td>
<td>5</td>
</tr>
<tr>
<td>Hire Rates</td>
<td>6</td>
</tr>
<tr>
<td>Servicing &amp; Repair</td>
<td>7</td>
</tr>
<tr>
<td>Technical Support &amp; Training</td>
<td>8-9</td>
</tr>
<tr>
<td>Leica Disto™ Laser Distancemeters</td>
<td>10-12</td>
</tr>
<tr>
<td>Line and Dot Lasers</td>
<td>13</td>
</tr>
<tr>
<td>Optical Levels</td>
<td>14</td>
</tr>
<tr>
<td>Digital Levels</td>
<td></td>
</tr>
<tr>
<td>Sprinter</td>
<td>15</td>
</tr>
<tr>
<td>DNA</td>
<td>16</td>
</tr>
<tr>
<td>Lasers</td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>18</td>
</tr>
<tr>
<td>Single Grade</td>
<td>19</td>
</tr>
<tr>
<td>Dual Grade</td>
<td>20</td>
</tr>
<tr>
<td>Pipe Lasers</td>
<td>22</td>
</tr>
<tr>
<td>Machine Control Sensors</td>
<td>23</td>
</tr>
<tr>
<td>Total Stations (TPS)</td>
<td></td>
</tr>
<tr>
<td>Flexline Plus</td>
<td>24</td>
</tr>
<tr>
<td>Viva TS11</td>
<td>26</td>
</tr>
<tr>
<td>Viva TS12</td>
<td>27</td>
</tr>
<tr>
<td>TCP9.200</td>
<td>29</td>
</tr>
<tr>
<td>Viva TS15</td>
<td>28</td>
</tr>
<tr>
<td>Viva Imaging</td>
<td>30</td>
</tr>
<tr>
<td>SmartWorx Viva</td>
<td>32</td>
</tr>
<tr>
<td>Monitoring (TPS)</td>
<td></td>
</tr>
<tr>
<td>TM50</td>
<td>34</td>
</tr>
<tr>
<td>TS50</td>
<td>35</td>
</tr>
<tr>
<td>GeoMoS</td>
<td>38</td>
</tr>
<tr>
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</tr>
<tr>
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<td>Viva GS12</td>
<td>42</td>
</tr>
<tr>
<td>Viva GS15</td>
<td>43</td>
</tr>
<tr>
<td>Leica SmartNet</td>
<td>45</td>
</tr>
<tr>
<td>GIS</td>
<td>46</td>
</tr>
<tr>
<td>ICON</td>
<td>50</td>
</tr>
<tr>
<td>Geomatics Software</td>
<td>52</td>
</tr>
<tr>
<td>Cable Avoidance</td>
<td></td>
</tr>
<tr>
<td>Cable Avoidance</td>
<td>56</td>
</tr>
<tr>
<td>Precision Location</td>
<td>59</td>
</tr>
<tr>
<td>Rail</td>
<td></td>
</tr>
<tr>
<td>Track Measuring Device</td>
<td>64</td>
</tr>
<tr>
<td>4Site Rail</td>
<td>65</td>
</tr>
<tr>
<td>HDS Scanning</td>
<td></td>
</tr>
<tr>
<td>Leica Accessories</td>
<td>70</td>
</tr>
<tr>
<td>Ancillary Items</td>
<td>88</td>
</tr>
<tr>
<td>Used Survey Equipment</td>
<td>104</td>
</tr>
<tr>
<td>Finance Options</td>
<td>105</td>
</tr>
<tr>
<td>Index</td>
<td>106</td>
</tr>
</tbody>
</table>

### How to Order

**Order On-Line**  
To order any product visit our website [surveyequipment.com](http://surveyequipment.com)

**By Phone**  
01189 820 500  
Overseas: +441189 820 500

**By Email**  
sales@surveyequipment.com

**By Fax**  
01189 820 509  
Overseas: +441189 820 509

**Opening Hours**  
8.00am - 5.30pm Mon - Fri

### FIND US ON

- [@opticalsurvey](https://twitter.com/opticalsurvey)
- [Optical Survey Equipment](https://opticalsurvey.co.uk)
- [surveyequipment](https://surveyequipment.com)

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All information and prices are correct at the time of publication and exclude delivery and VAT at the current rate. All prices are subject to change without notice.
Hire Rates

Our fleet of instruments located at our offices in Reading, Gatwick and Milton Keynes are maintained to a high quality due to the implementation of up-to-date service records and replacement schemes.

Nationwide next day delivery is offered as standard; however we are able to offer a same day delivery in some circumstances. Please call to discuss equipment and pricing; long term hire rates are negotiable.

<table>
<thead>
<tr>
<th>Leica Optical Levels</th>
<th>Hire Rate Per Week</th>
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<tbody>
<tr>
<td>Automatic Level</td>
<td>£10.00</td>
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<tr>
<td>NA 2 Precise Automatic Level</td>
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<tr>
<td>DNA 03 Precise Digital Level (+/-0.3mm)</td>
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<tr>
<th>Leica Laser Equipment</th>
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<tr>
<td>Rotating Laser - Rugby 100</td>
<td>£25.00</td>
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<tr>
<td>Interior Laser</td>
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<td>Dual Grade Laser - Rugby 400</td>
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<td>Pipe Laser - Piper 100</td>
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<td>Basic Total Station</td>
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<td>TCRP120D+ One Man Total Station Kit</td>
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<td>Viva TS15 5” One Man Total Station Kit</td>
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<td>Viva TS15 1” One Man Total Station Kit</td>
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<td>TS20/TS120 Monitoring Total Station</td>
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<table>
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<th>Leica GNSS &amp; GPS Equipment</th>
<th>Hire Rate Per Week</th>
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<tr>
<td>Viva NetRover (Includes SmartNet Licence &amp; Vodafone GPRS data)</td>
<td>£350.00</td>
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<tr>
<td>Viva SmartRover (Includes SmartNet Licence &amp; Vodafone GPRS data)</td>
<td>£400.00</td>
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<tr>
<td>GPS + IGIaas Full RTK Base &amp; Rover</td>
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<td>GPS Only Full RTK Base &amp; Rover</td>
<td>£400.00</td>
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<tr>
<td>SmartStation (TST, SmartHandle, Antenna, GSM Module, SmartNet, Vodafone GPRS)</td>
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<td>SmartStation Accessories (Excludes TST)</td>
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<td>SmartNet Licence &amp; Sim</td>
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<table>
<thead>
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<th>Accessories</th>
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<td>360 Degree Mini Prism (Including 4 x poles)</td>
<td>£10.00</td>
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<tr>
<td>Traverse Prism Station (Including Tripod)</td>
<td>£10.00</td>
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<tr>
<td>Diagonal Eyepiece</td>
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<td>CAT Detector</td>
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<tr>
<td>Genny (To be used with CAT)</td>
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<tr>
<td>Additional Laser Detector</td>
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Hire & Servicing

With eight highly trained service technicians our service centres provide recognised top class calibration and repair to a wide range of survey equipment. Our technicians have been Leica factory trained, the workshops are fully accredited by Leica Geosystems, and we use only genuine components. We also hold a large stock of Leica spare parts enabling us to complete required repairs quickly and efficiently. Opti-cal can offer you the best service for your instrument.

Our experience with working for equipment suppliers allow us to confidently issue certificates with the knowledge that it will provide accuracy and reliability in the workplace.

Understanding the rigors of the construction site and potential damages in transit, we will be pleased to talk you through the potential implications of using inaccurate instrumentation and how we can assist.

We can offer replacement instruments from our hire fleet during a service to minimise down time.

Prices

<table>
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<tr>
<th>Levels</th>
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<tr>
<td>Automatic Level</td>
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<td>Precise Level</td>
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<tr>
<td>Digital Level</td>
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<table>
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<tr>
<th>Lasers</th>
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<tr>
<td>Exterior Rotating Laser</td>
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<td>Interior Rotating Laser</td>
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<td>Grade Laser</td>
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<tr>
<td>Pipe Laser</td>
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<table>
<thead>
<tr>
<th>Total Stations</th>
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<tr>
<td>Electronic Theodolite</td>
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<tr>
<td>Total Station</td>
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<tr>
<td>Reflectorless Total Station</td>
<td>£120.00</td>
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<tr>
<td>Motorised Total Station</td>
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<tr>
<td>One Man Total Station – c/w Controller Series</td>
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<table>
<thead>
<tr>
<th>Accessories</th>
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<tr>
<td>Prism Station</td>
<td>£25.00</td>
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<tr>
<td>CAT Locator “Dependent on Make &amp; Model” From £75.00</td>
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</tr>
<tr>
<td>Genny/Transmitter “Dependent on Make &amp; Model” From £65.00</td>
<td></td>
</tr>
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</table>

Available on All Makes & Models
Technical Support

Over many years, Opti-cal has acquired the expertise of the leaders in the surveying field. We have built a service business with a full range of the best products in the world, combined with the best support people in the country.

Technical Support

At Opti-cal, we understand the importance of supporting our extensive range of surveying products. With a highly committed and responsive technical support and training team who can answer your questions, whether simple or complex, and provide the required product training.

To this extent, we have recently invested in our support structure to expand our team, so that we can continue to provide the level of service that our clients demand. This new support and training structure comprises of a dedicated technical support phone line (and email) to quickly assist with your day to day support and training needs, and backed-up by field based product experts.

Our dedicated support number is available to new and existing customers: 01293 565 565.

Our online support section includes the following items for your convenience:

- Documentation - Manuals, Quick Guides & Release Notes
- Software
- Instrument Firmware
- Drivers
- Instrument Application Programs
- Simulators
- Instrument Language Files
- Recovery Software
- Format Files
- Links to Leica Support

For online support visit: surveyequipment.com/support.

Training

In addition to technical support, we also understand that high quality training is critical and the key to unlocking the true potential of your survey equipment. Our structured training programs will enable you to take full advantage of your instruments capabilities, and improve your work flow, both in the field and in the office, with the goal of increasing your productivity and giving your company a competitive advantage. Opti-cal can offer a flexible selection of training packages to suit your company’s needs, experience and time frame.

Training Courses

Total Stations (TPS)
Getting Started (1 day)
Workflow training for any Leica Total Station, including data exchange with popular CAD packages.
Learn the standard functions of your TPS instrument and be able to perform common survey tasks, including detail and set-out surveys.
Advanced TPS (1 day)
Understand how to customise your instrument, perform advanced field coding, create / edit data export formats and the more advanced on-board applications. Import data into Leica Geo Office (LGO), edit and export to required format and generate jobs using design to field.

GPS/GNSS
Getting Started (1 day)
Learn the basic concepts of GPS/GNSS positioning and the functionality of your Leica equipment, workflow training in RTK including detail surveys, coding and export of data, and perform site transformation to gain an understanding of coordinate systems.
Advanced (1 day)
Explore the advanced settings of the Leica GPS/GNSS. Learn complete equipment configuration, static data capture and basic processing, field coordinate transformation, the more advanced applications and how to create field data reports.

Leica Geo Office
Getting Started (1 day)
Workflow training in Leica Geo Office incorporating TPS/GPS data import, editing, simple processing, and basic analysis. This course provides a detailed explanation behind the settings and functionality enabling the user to get the most from the LGO software.
Advanced (1 day)
Develop your understanding of static post-processing, data analysis, reporting and network adjustment.
Learn new troubleshooting skills. Then further explore LGO looking at precise ephemeris, internet download and image referencing.

Additional Courses

Introduction to RoadRunner (1 day)
This course is designed for new users of the RoadRunner application. You will be taken through the practical procedures necessary for performing road setout within RoadRunner. The course will include an explanation of stringlines, RoadRunner elements and task development.

Customised Company Training
All published courses may be customised to your company’s requirements, allowing you to get the most from your training investment.
Choose between training on-site, at your office or at one of our locations. Or let us know what training you need and we’ll do our best to accommodate.
Which DISTO™ is right for you?

Are you measuring indoors and outdoors?

What is your measuring application?

What is the maximum distance that you would like to measure?

How often will you be using the laser measure?

How accurate do you need to measure to?

Does your job require the ability to measure angles, or measure over obstructions?

Are you measuring slopes, heights or checking levels?

Do you need to transfer your measurement to a PDA or laptop?

A laser distance meter is a hi-tech measuring device and depending on the application, the range of Leica DISTO™ will cover the measuring task in hand.

Leica DISTO™
Leica DISTO™ – the innovative hand-held laser meter for fast and easy distance measurements of length, squares and volumes with the press of a button. Save time and money and emphasise your competence with modern measuring methods. Choose from the DISTO™ D210, DISTO™ X310, DISTO™ D3a BT, DISTO™ D5 and DISTO™ D8.

Leica DISTO™ D210
The compact and handy entry-level model has many interesting functions and is still simple to use. Addition and subtraction, area and volume calculations for rapid and reliable site measurement. The last 10 results are stored.

£129.00

Leica DISTO™ D3a BT
The Leica Disto D3a BT has all the functions of the Disto D3a. In addition it offers the convenience of wireless, error free data transfer to PCs and pocket PCs.

£319.00

Leica DISTO™ D5
World First: Digital Pointfinder with 4x Zoom! Designed with many functions and features to make measuring easier, particularly when you are working outdoors.

£349.00

Leica DISTO™ D8
The most versatile laser distance meter in the world! Equipped with a digital Pointfinder, high-res 2.4” colour display, 360° tilt sensor and bluetooth® technology.

£599.00

For accessories see page 71

For accessories see page 71

Leica DISTO™ Accessories
We supply the complete range of accessories please see page 71 for a selection.

Functions

<table>
<thead>
<tr>
<th>Functions</th>
<th>D210</th>
<th>X310</th>
<th>D3a BT</th>
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</table>
Leica 3D Disto™


Stay in control – in whatever shape of room. Capture and record distances, areas, inclinations, and angles effortlessly, even for inaccessible points. Forgotten measurements and handwriting errors are things of the past.

It can do everything
- Measure plan position, height and distance, in all three spatial axes
- Intuitive user guidance from Assistants
- Measure from one station – every visible point can be measured by targeting with the visible laser dot – without the need to walk to the target
- Measure to difficult-to-reach points, such as roof edges
- As-built records of ceiling, floor and roof surfaces, volumes, inclination, falls, height differences, angles
- Plumbing of points, parallel offsetting of axes, levelling, transferring levels from wall to wall. Forget spirit level and measuring tapes!
- Realtime display of measurements as drawings on the screen
- Positionally accurate representation of the measured points in the camera display
- Pocket calculator
- Recording information in the form of standard tables, photos, DXF files, text files at the press of a button
- Remote control measurements
- Data import and export on PC and USB stick

Leica 3D Disto™ Package Please call for Price

Line and Dot Lasers

Setup, Switch on, Ready! – Leica Linos project lines or points to millimeter accuracy, leaving your hands free to get on with the job. Making your work a lot easier! They automatically compensate for minor angular misalignments by levelling themselves over a range of ± 4°. So you avoid errors. The top quality optics and proven Power Range Technology™ ensure that the projected laser lines and points are highly visible and accurate. So they are simple to understand and easy to operate.

Leica Lino P3
The Leica Lino P3 is excellent for plumbing up and down and transfers all the points you need, quickly and accurately.

£149.00

Leica Lino P5
The Leica Lino P5 projects five laser beams, which are exactly at right angles to one another. This greatly simplifies setting out tasks and makes your interior fitting-out more precise and efficient.

£229.00

Leica Lino L2 Cross Line Laser – The perfect alignment tool
The time consuming and tedious drawing of lines on the wall is a thing of the past. The Leica UNDM™ L2 projects exactly, quickly and easily – allowing you to concentrate on the job in hand.

£169.00

Leica Lino L2+
Simply perfect all along the line! The Leica Lino L2+ projects them exactly, quickly and easily – allowing you to concentrate on the job in hand.

£179.00

Leica Lino L2P5
The all in one layout and alignment tool. The Leica Lino L2P5 combines all the advantages of the Lino dot and line lasers. It has four points and two lines which are exactly at right angles to one another.

£319.00
Leica Optical Levels

Leica Runner Series
The Leica Runner series represents a great value for money automatic builder’s level. Designed to work hard on the job site, they are quick to set up, simple to use and very reliable.

Leica NA700 Levels
NA700 series combines reliability, accuracy and toughness to provide optimum results for an optical level. It’s the ideal choice for engineers and surveyors and, the ‘best in class’ optics enable you to always work as precisely as possible, even in twilight.

Leica NA2/NAK2
The Leica NA2 meets all the requirements of precision levelling. As soon as it is set-up on a tripod and levelled with the bubble, the automatic compensator ensures that the line of sight is horizontal so that each staff reading can be transferred to an external data collector via RS232 interface.

Leica Sprinter Digital Levels
The Leica Sprinter Electronic Level offers everything that you would expect from a construction instrument. It enhances user benefits with a simple user interface and value-added functions:

- User-friendly menu
- Automatic height calculation and delta height
- The right levelling applications
- Built-in memory

Leica Sprinter for Advanced Levelling Work
The Sprinter is the perfect tool for advanced construction levelling tasks. Store up to 1000 measurements, download and transfer them for further calculations to Excel to a PC via USB.

Leica Sprinter Onboard Software:
- Delta height
- Line Levelling
- Cut & fill

Advanced Levelling:
- Aim and Focus: With its high-accuracy optical elements you simply aim and focus the staff as an optical level.
- Push the Button: With its easy one-button operation, Leica Sprinter does not need any intensive training. Simply push the red button to take the measurement. That’s all you need to do.
- Read: Optical reading is no longer needed. The bar code on the staff determines height and distance which is displayed on a highly visible LCD display. There will be no misreading.
- Calculate: The Leica Sprinter takes on your calculations. Choose the right application in your language. The correct results will be displayed: Delta height, Line levelling, Cut & fill, Tracking & monitoring.
- Memorize: With their built-in memory for storing up to 1000 points, avoid transcription errors.
- Download: With Leica Sprinters data can be downloaded to your personal computer via USB Interface. The Sprinter Data Loader enables a smooth data transfer to Excel. Your measurements can also be transferred to an external data collector via RS232 interface.

Benefits:
- Increase Productivity
- Minimise Human Errors
- Operate in Low Light Conditions

Leica Runner Series

<table>
<thead>
<tr>
<th>Features</th>
<th>Runner 24</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnification</td>
<td>24x</td>
</tr>
<tr>
<td>Angle Measurement</td>
<td>360°</td>
</tr>
<tr>
<td>Standard Deviation (per km double/run)</td>
<td>2.0mm</td>
</tr>
<tr>
<td>Dust/Water Protection</td>
<td>IP55</td>
</tr>
<tr>
<td>Weight</td>
<td>2 kg</td>
</tr>
<tr>
<td>Warranty</td>
<td>1 year</td>
</tr>
<tr>
<td>Level Only Price</td>
<td>£99.95</td>
</tr>
<tr>
<td>Level c/w Tripod &amp; Staff</td>
<td>£154.95</td>
</tr>
</tbody>
</table>

Leica NA700 Levels

<table>
<thead>
<tr>
<th>Features</th>
<th>NA700</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnification</td>
<td>30x</td>
</tr>
<tr>
<td>Angle Measurement</td>
<td>360°/400°</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.7mm/km</td>
</tr>
<tr>
<td>Dust/Water Protection</td>
<td>IP57</td>
</tr>
<tr>
<td>Weight</td>
<td>1.8 kg</td>
</tr>
<tr>
<td>Warranty</td>
<td>2 years</td>
</tr>
<tr>
<td>Level Only Price</td>
<td>£199.00</td>
</tr>
<tr>
<td>Level c/w Tripod &amp; Staff</td>
<td>£254.95</td>
</tr>
</tbody>
</table>

Leica NA2/NAK2

<table>
<thead>
<tr>
<th>Features</th>
<th>NA2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnification</td>
<td>30x</td>
</tr>
<tr>
<td>Angle Measurement</td>
<td>360°/400°</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0.7mm/km</td>
</tr>
<tr>
<td>Dust/Water Protection</td>
<td>IP57</td>
</tr>
<tr>
<td>Weight</td>
<td>2.4 kg</td>
</tr>
<tr>
<td>Warranty</td>
<td>3 years</td>
</tr>
<tr>
<td>Level Only Price</td>
<td>£1,185.00</td>
</tr>
<tr>
<td>Level c/w Tripod &amp; Staff</td>
<td>£1,184.90</td>
</tr>
</tbody>
</table>

Leica Sprinter Digital Levels

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Sprinter 150M</th>
<th>Sprinter 250M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height accuracies</td>
<td>Standard deviation height measurement per 1 km double run (ISO 17123-2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.5 mm</td>
<td>1.0/0.7 mm</td>
</tr>
<tr>
<td>Electronic measurement*</td>
<td>1.5 mm</td>
<td>1.0/0.7 mm</td>
</tr>
<tr>
<td>Optical measurement</td>
<td>With standard aluminium Escale/Numeral staff: 2.5 mm</td>
<td></td>
</tr>
<tr>
<td>Angle staff reading</td>
<td>Standard Deviation: 0.6 mm (electronic) and 1.2 mm (optical) at 30 m</td>
<td></td>
</tr>
<tr>
<td>Range</td>
<td>2 - 100 m (electronic)</td>
<td></td>
</tr>
<tr>
<td>Time for single measurement</td>
<td>&lt;3 sec</td>
<td></td>
</tr>
<tr>
<td>Compensator</td>
<td>Magnetic, damped pendulum compensator (range +/- 10 mm)</td>
<td></td>
</tr>
<tr>
<td>Telescope</td>
<td>Magnification (optical) 24x</td>
<td></td>
</tr>
<tr>
<td>Data storage</td>
<td>up to 1000 points</td>
<td></td>
</tr>
<tr>
<td>Environmental conditions</td>
<td>IP66</td>
<td></td>
</tr>
<tr>
<td>Price (Level Only)</td>
<td>£699.00</td>
<td>£995.00</td>
</tr>
</tbody>
</table>
Leica DNA Digital Levels

Leica DNA Digital Levels

Leica DNA Digital Levels DNA10 and DNA03 cover the entire range of applications from the construction site to the 1st order levelling tasks. The practice oriented solutions in the integrated measurement programs, the large display and the alphanumeric keyboard help to keep track of your work, make it faster and more productive.

- Up to a 50% time saving when compared with conventional levels.
- Measure & Rec function lets you easily measure and record height differences
- Compare the closing height quickly with a known point using Quick-Closure
- Use the complete onboard Line-Adjustment to erase errors
- Clear & Simple line levelling process

Link with Leica Geo Office

The level option processes your levelling data in a professional manner. The optional program contains functions such as line calculation, adjustment and the creation of reports. A second level option allows to adjust a complete Level Line Network.

### Leica DNA03 vs. Leica DNA10

<table>
<thead>
<tr>
<th>Feature</th>
<th>Leica DNA03</th>
<th>Leica DNA10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accuracy</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronic measurements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>with Invar staffs</td>
<td>0.3mm</td>
<td>0.9mm</td>
</tr>
<tr>
<td>with standard staffs</td>
<td>1.0mm</td>
<td>1.5mm</td>
</tr>
<tr>
<td>Telescope magnification</td>
<td>24x</td>
<td></td>
</tr>
<tr>
<td>Compensator setting accuracy (SD)</td>
<td>0.3”</td>
<td>0.8”</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronic measurement</td>
<td>1.8m - 110m</td>
<td></td>
</tr>
<tr>
<td>Optical measurement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronic measurement</td>
<td>0.01mm, 0.0001ft, 0.0005 inch</td>
<td>0.1mm, 0.001ft</td>
</tr>
<tr>
<td>Resolution height measurement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measurement modes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internal memory</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Measurement programs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coding</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Price (Level Only)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Barcoded &amp; Invar Staves</strong></td>
<td>£3,200.00</td>
<td>£2,600.00</td>
</tr>
<tr>
<td><strong>Sprinter + DNA Processing</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Digital level data processing - the answer you’ve been waiting for!

The Digital Levelling Suite program has been designed in conjunction with Land Surveyors who use the Leica DNA/SPRINTER levels on a day to day basis. It has been designed to overcome some of the short falls with the Leica DNA/SPRINTER software, to allow easy conversion from the raw data file to a standard Levelling Book format. The software has been designed on the Microsoft Excel platform, thus giving the user the advantage of the Microsoft Excel interface which most surveyors will already be familiar with. Provided with this software is the format file required to be loaded into the Leica DNA/SPRINTER, and instructions on how to accomplish this.

**Features Include:**
- Seamless data import
- Uses MS Excel
- All spreadsheets have your company logo, colours & details
- Produces familiar Level Book format
- Spreadsheets all formulated
- Merge level lines together for network levelling
- QA checks on each sheet
- Data ready to print & send to client in minutes
- Export adjusted data to 3rd party software

Prices:
- Sprinter Only Processing £100.00
- DNA Only Processing £300.00
- Sprinter + DNA Processing £350.00

Please contact us for further information or to arrange a demonstration
### Leica Laser Levels

**Leica Rugby 50**  
The simple one-button Construction Laser  
Rugged, reliable, accurate. The Leica Rugby 50 is the affordable "little brother" of the popular Leica Rugby 100. The Rugby 50 provides value where ever it is used. Work gets done faster and more accurately, providing savings in labour, time and materials.

<table>
<thead>
<tr>
<th>Features</th>
<th>Rugby 50</th>
<th>Rugby 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Range</td>
<td>300m</td>
<td>300m</td>
</tr>
<tr>
<td>Accuracy</td>
<td>+/- 2.6mm @ 30m</td>
<td>+/- 1.5mm @ 30m</td>
</tr>
<tr>
<td>Elevation Alert</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Self-Leveling</td>
<td>Horizontal</td>
<td>Horizontal</td>
</tr>
<tr>
<td>Dust/Water Protection</td>
<td>IP55</td>
<td>IP56</td>
</tr>
<tr>
<td>Manual Grade Capacity</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Warranty</td>
<td>2 years with registration</td>
<td></td>
</tr>
</tbody>
</table>

**Leica Rugby 100**  
High power, incredibly tough, automatic leveling, rotational laser ideal for all site work applications.  
The Rugby 100 is an automatic self-leveling rotating laser for general construction. The Rugby 100 automatically levels in under 30 seconds, has a simple four-switch keypad that controls all the functions, plus a low-battery indicator.

<table>
<thead>
<tr>
<th>Features</th>
<th>Rugby 50</th>
<th>Rugby 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Range</td>
<td>300m</td>
<td>300m</td>
</tr>
<tr>
<td>Accuracy</td>
<td>+/- 1.5mm @ 30m</td>
<td>+/- 1.5mm @ 30m</td>
</tr>
<tr>
<td>Elevation Alert</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Self-Leveling</td>
<td>Horizontal</td>
<td>Horizontal</td>
</tr>
<tr>
<td>Dust/Water Protection</td>
<td>IP55</td>
<td>IP56</td>
</tr>
<tr>
<td>Manual Grade Capacity</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>Warranty</td>
<td>2 years with registration</td>
<td></td>
</tr>
</tbody>
</table>

### Leica Single Grade Lasers

**Leica Rugby 260SG**  
A highly accurate, general construction laser with single grade capability. A rugged general construction laser with great accuracy, LCD grade readout and semi-automatic grade with bump alert.

<table>
<thead>
<tr>
<th>Price</th>
<th>£945.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Level, Detector &amp; Bracket</td>
<td>(NiMH Batt Pack &amp; Charger)</td>
</tr>
<tr>
<td>Laser Level Kit c/w Tripod &amp; Staff</td>
<td>£545.00</td>
</tr>
</tbody>
</table>

**Leica Rugby 270SG**  
A fully automatic, single grade laser. For the general construction contractor that needs a level or single slope for flat work, site preparation, septic installation, trenching and more.

<table>
<thead>
<tr>
<th>Price</th>
<th>£1,395.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Level, Detector &amp; Bracket</td>
<td>(NiMH Batt Pack &amp; Charger)</td>
</tr>
<tr>
<td>Laser Level Kit c/w Tripod &amp; Staff</td>
<td>£1,445.00</td>
</tr>
</tbody>
</table>

**Leica Rugby 320SG**  
Long Range Single Grade Laser with a -5 to +25% grade capability and a 900m operating diameter.

<table>
<thead>
<tr>
<th>Price</th>
<th>£1,795.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Level, Detector &amp; Bracket</td>
<td>(NiMH Batt Pack &amp; Charger)</td>
</tr>
<tr>
<td>Laser Level Kit c/w Tripod &amp; Staff</td>
<td>£1,845.00</td>
</tr>
</tbody>
</table>

### Leica Rugby 50

**Features**

- **Rugby 50**: 300m  
- **Accuracy**: +/- 2.6mm @ 30m  
- **Elevation Alert**: Yes  
- **Self-Leveling**: Horizontal  
- **Dust/Water Protection**: IP55  
- **Manual Grade Capacity**: –  
- **Warranty**: 2 years with registration

### Leica Rugby 100

**Features**

- **Rugby 100**: 300m  
- **Accuracy**: +/- 1.5mm @ 30m  
- **Elevation Alert**: Yes  
- **Self-Leveling**: Horizontal  
- **Dust/Water Protection**: IP56  
- **Manual Grade Capacity**: –  
- **Warranty**: 2 years with registration

### Leica Rugby 260SG

**Features**

- **Rugby 260SG**: 600m  
- **Accuracy**: +/- 1.5mm @ 30m  
- **Grade Range**: +/- 10% (x-axis)  
- **Self-Leveling**: Horizontal  
- **Dust/Water Protection**: IP67  
- **Two Year plus knockdown warranty**: Yes

### Leica Rugby 270SG

**Features**

- **Rugby 270SG**: 700m  
- **Accuracy**: +/- 1.5mm @ 30m  
- **Grade Range**: +/- 10% (x-axis)  
- **Self-Leveling**: Horizontal/Grade  
- **Dust/Water Protection**: IP67  
- **Two Year plus knockdown warranty**: Yes

### Leica Rugby 320SG

**Features**

- **Rugby 320SG**: 900m  
- **Accuracy**: +/- 1.5mm @ 30m  
- **Grade Range**: +/- 15% (x-axis)  
- **Self-Leveling**: Horizontal/Grade  
- **Dust/Water Protection**: IP67  
- **Two Year plus knockdown warranty**: Yes
Leica Dual Grade Lasers

Leica Rugby 280DG
Multipurpose Plus. A horizontal, vertical and dual grade laser for any exterior or interior application. “Plus” with fully automatic, dual grade capability. It has a bright red beam, plumbl beam, scan mode, horizontal and vertical selfleveling, plus dual grade up to 15% in both axes. Available with a two-way remote control, the Rugby 280DG fits well in any construction plan.

<table>
<thead>
<tr>
<th>Features</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Level, Detector &amp; Bracket (NiMH Batt Pack &amp; Charger)</td>
<td>£1,695.00</td>
</tr>
<tr>
<td>Laser Level Kit c/w Tripod &amp; Staff</td>
<td>£1,745.00</td>
</tr>
</tbody>
</table>

Leica Rugby 410DG Laser Level
The Rugby 410 Dual Grade Laser is automatic and self leveling for jobs of any size, large or small. It can be used for any application involving precise grade.

- Large easy to see LCD display
- On Screen menus
- Variable head speeds

<table>
<thead>
<tr>
<th>Features</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Level &amp; Detector Kit (NiMH Batt Pack &amp; Charger)</td>
<td>£2,995.00</td>
</tr>
<tr>
<td>Laser Level Kit c/w Tripod &amp; Staff</td>
<td>£2,345.00</td>
</tr>
</tbody>
</table>

Leica Rugby 420DG Laser Level
Long Range Dual Grade Laser the Rugby 420 Dual Grade Laser is automatic and self leveling for jobs of any size, large or small. It can be used for any application involving precise grade.

- Operating range of 1,100m diameter
- Simple to operate – only 5 buttons
- Direct Grade Entry, or Manual mode
- Ideal for use with machine control equipment

<table>
<thead>
<tr>
<th>Features</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser Level &amp; Detector Kit (NiMH Batt Pack &amp; Charger)</td>
<td>£2,995.00</td>
</tr>
<tr>
<td>Laser Level Kit c/w Tripod &amp; Staff</td>
<td>£2,345.00</td>
</tr>
</tbody>
</table>

Leica Laser Receivers

The Rod Eye Basic
The Rod Eye Basic is a great receiver for those looking for value at a low price. Offering two accuracy settings, high/low audio output and a 150 m range, the Rod Eye Basic is a quality receiver that is ready to work for you.

**Rod Eye Basic with Bracket £105.95**

The Rod Eye Plus
The Rod Eye Plus is a full featured receiver with proven performance in the field. Three bright LEDS, nine channel arrow display and audio output provide the user with all the information needed to lock on the laser beam and get the job done right.

**Rod Eye Plus with Bracket £149.95**

The Rod Eye Digital
The Rod Eye Digital is the top of the line receiver with digital readout, 0.5 mm accuracy, and strobe rejection. The Digital has a 127 mm (5 inch) pickup window which is the result of truly unique technology and provides the Digital with the best accuracy in the industry.

**Rod Eye Digital with Bracket £225.00**

<table>
<thead>
<tr>
<th>Receivers at a glance</th>
<th>Rod Eye Basic</th>
<th>Rod Eye Plus</th>
<th>Rod Eye Digital</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Radius</td>
<td>150 m</td>
<td>450 m</td>
<td>450 m</td>
</tr>
<tr>
<td>Detection Height</td>
<td>36 mm</td>
<td>50 mm</td>
<td>127 mm</td>
</tr>
<tr>
<td>Detection Accuracy</td>
<td>Two</td>
<td>Three</td>
<td>Five</td>
</tr>
<tr>
<td>Audio Volumes</td>
<td>Two</td>
<td>Two</td>
<td>Three</td>
</tr>
<tr>
<td>Arrow Display</td>
<td>Five channels</td>
<td>Nine channels</td>
<td>Twenty-one channels</td>
</tr>
<tr>
<td>LED Display</td>
<td>No</td>
<td>Yes, five channels</td>
<td>Yes, five channels</td>
</tr>
<tr>
<td>Warranty</td>
<td>One year</td>
<td>Two years</td>
<td>Three years</td>
</tr>
</tbody>
</table>
Leica Piper 100/200

**Rock solid Construction, outstanding performance in a compact package.**

Built with a rugged aluminium housing, these pipe lasers perform powerfully even in tough jobsite conditions. The Leica Piper is the only pipe laser that fits inside a 100 mm (four inch) pipe.

- Automatic grade compensation
- Long battery life
- Bright, powerful beam
- Large, easy to read display
- Alignmaster™ - Automatic target recognition (Piper 200)

---

Agatec MR240 Machine Receiver

Ideal for use with backhoes and mini-excavators, the Agatec MR240 offers the convenience of a machine-mounted display at an economical price. It features LED indicators to show the position of cutting edge in relation to laser reference beam. Three indicators in coarse mode, up to five in fine mode. Equipped with magnet mount with extra strong rare earth magnets.

- Accurate grade information for all visual machine control applications
- Extra strong rare earth magnets
- Rugged design, waterproof

**Package Includes:**

- MR240 Machine Receiver
- Alkaline batteries
- Carry Case

**Package Price £450.00**

---

Agatec MR360 R 360 Machine Mounted Receiver

The MR360R offers accurate grade information for all visual machine control applications. Large 360 degree detection windows pick up any rotating laser, from any angle.

Built-in vertical indicator monitors angle of the stick, signalling if it’s plumb or under or over-extended. Vertical position ensures consistent and accurate grade readings, saving money by reducing over or under-cutting.

**Package Includes:**

- MR360R Rechargeable Receiver with Magnet or Clamp Mount
- 110/240V Charger for MR360R
- MD360R Remote Display
- Suction Cup (for MG360R Mount)
- MR360R User Manual
- Carry Case

**Package Price £1,200.00**

---

Leica Pipe Lasers

**Leica Piper 100/200**

**Rock solid Construction, outstanding performance in a compact package.**

Built with a rugged aluminium housing, these pipe lasers perform powerfully even in tough jobsite conditions. The Leica Piper is the only pipe laser that fits inside a 100 mm (four inch) pipe.

<table>
<thead>
<tr>
<th>Features</th>
<th>Piper 100</th>
<th>Piper 200</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beam</td>
<td>Highly visible red beam</td>
<td>Highly visible red beam</td>
</tr>
<tr>
<td>Display</td>
<td>Large, easy to read LCD display</td>
<td>Large, easy to read LCD display</td>
</tr>
<tr>
<td>Alignmaster*</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Line and Grade Locks</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Wide Line Adjustment</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Self-leveling</td>
<td>Over full range</td>
<td>Over full range</td>
</tr>
<tr>
<td>Grade entry</td>
<td>Direct or by digit</td>
<td>Direct or by digit</td>
</tr>
<tr>
<td>Remote control</td>
<td>Yes, wireless</td>
<td>Yes, wireless</td>
</tr>
<tr>
<td>Housing</td>
<td>Rock solid metal</td>
<td>Rock solid metal</td>
</tr>
<tr>
<td>Battery pack</td>
<td>Rechargeable Lithium-Ion</td>
<td>Rechargeable Lithium-Ion</td>
</tr>
<tr>
<td>Waterproof</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Warranty *Extendable to 5 years total</td>
<td>2 Years*</td>
<td>2 Years*</td>
</tr>
</tbody>
</table>

**Price**

- £1,695.00
- £1,895.00
Leica Flexline
Plus Total Station

For basic to advanced users with the need for flexibility and performance.

To ensure that you stay one-step-ahead, Leica Geosystems has developed a new generation of Total Stations using latest technology, the Leica FlexLine. For the first time, hardware and software options can be simply selected so that the FlexLine Total Station exactly meets your requirements. The FlexLine family of Total Stations provide you with complete flexibility and performance. Simply select one of the pre-configured products, or compose your own Total Station by using the flexibility of adding specific hardware and software options to a base model. The choice is yours, and performance is guaranteed.

Leica FlexLine TS02 – Ideal Today, Perfect Tomorrow
The ideal Total Station for standard measurement tasks. Designed especially for mid-to-low accuracy applications. It comes complete with a standard set of application software that guides you through your daily work.

Instrument only from £3,295.00

Leica FlexLine TS06 plus – Flexibility that counts
For complete flexibility a Total Station that is ready for any challenge. Designed for mid accuracy applications. As standard, an alpha-numerical keyboard and a complete set of application software is included. If more convenient, use Bluetooth® wireless technology to connect any data collector, e.g. the Leica CS10/15. For additional flexibility, a wide range of options ensures that you can always count on your TS06 Total Station.

Instrument only from £4,995.00

Leica FlexLine TS09 plus – Performance Guaranteed
The Leica FlexLine TS09plus Manual Total Station is ideal for mid- to high-accuracy applications. The brilliant colour display with touch operation, offer the highest performance and ease of use. Equipped with all FlexLine features from removable USB memory, Bluetooth® wireless technology, Emitting Guide Light to a complete range of application software, your TS09 guarantees maximum performance. If more convenient, use Bluetooth® wireless technology to connect any data collector, e.g. the Leica CS10/15.

Instrument only from £6,495.00

FlexField plus Onboard Software
The new Leica FlexField plus software is without a doubt a highlight of the FlexLine plus. Its advantages are immediately apparent with the extra-large, built-in colour & touch display.

• Low learning curve due to guided workflows
• Easy to understand graphics and icons
• Icons to quickly verify instrument status
• Fast navigation inside the software via touchscreen, tabs and icons
• High resolution colour display to show all information without misinterpretation
• Larger font size for fast and clear readability
• Fast operation through graphic guidance

*Colour Screen on TS09 plus only

The Leica FlexLine TS09plus Communication Side Cover enables cable-free connection to any data collector via Bluetooth®, for example the field-controllers Leica Viva CS10 or Leica Viva CS15 with SmartWorks Viva software. The USB-stick enables the flexible transfer of such data as GSI, DXF, ASCII, LandXML and CSV.

Leica Geosystems – mySecurity
mySecurity gives you total peace of mind. If your instrument is ever stolen, a locking mechanism is available to ensure that the device is disabled and can no longer be used.

Legend: ✓ Included  O Option  X Not available
Leica Viva TS11 Manual Total Station

The Leica Viva TS11 is the most advanced manual total station with the inclusion of advanced imaging functionality and the Leica SmartWorx Viva easy-to-use onboard software. Leica Viva TS11 raises productivity to the next level with imaging and Leica SmartWorx Viva software. The unique capturesketch-link functionality enables high resolution total station images to be captured, enhanced with sketching and then linked to any point of interest. Costly revisits can be avoided to significantly improve productivity. Every vision on every scale becomes reality with ease.

Options Available:

- Angular accuracy
  - 1” (0.3 mgon), 2” (0.6 mgon), 3” (1 mgon), 5” (1.5 mgon)
- PinPoint (Non Prism)
  - R30 / R400 / R1000
- Leica Viva SmartStation
  - GS12/GS15

Key Facts:

<table>
<thead>
<tr>
<th>Angular Measurement</th>
<th>Display resolution</th>
<th>0.1” (0.1 mgon)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compensation</td>
<td>Quadruple axis compensation</td>
<td></td>
</tr>
<tr>
<td>Distance Measurement</td>
<td>Prism Range</td>
<td>Up to 5400m</td>
</tr>
<tr>
<td>Standard Accuracy</td>
<td>1 mm + 1.5 ppm</td>
<td></td>
</tr>
<tr>
<td>PinPoint Non Prism Accuracy</td>
<td>2 mm + 2 ppm</td>
<td></td>
</tr>
<tr>
<td>Display resolution</td>
<td>0.1 mm</td>
<td></td>
</tr>
</tbody>
</table>

Leica Viva TS12 Total Station

The Leica Viva TS12 Performance Robotic package is a cost effective all in one solution enabling the user to begin efficient, cost effective one person engineering or surveying today.

Best-in-class Search-Lock-Measure

Leica Viva TS12 uses years of experience to optimally find, lock and measure to prisms with a single key press. With the unique PowerSearch sensor any prism type is found within seconds regardless of location.

Options Available:

- Angular accuracy
  - 2” (0.6 mgon), 3” (1 mgon) or 7” (2 mgon)
- PinPoint (Non Prism)
  - R400 or R1000
- Prism Lock
  - ATR, PowerSearch

Leica SmartWorx Viva LT for Simplicity in the Field

SmartWorx Viva LT is designed with simplicity in mind using clear graphics, logical menu structures, non-technical terminology and simplified workflows.

Leica TS12 Performance Package from £13,995.00

Other Accessories From Page 76
Leica 1200+ Total Station
Packed with features, built for speed, accuracy, ease-of-use and reliability Leica TPS1200+ total stations carry out even the most complex tasks, better and more efficiently than ever before. Combine your TPS1200+ with a Leica Viva CS10/15 to give you a powerful surveying or setting out system. There are many advantages to using Leica one-man technology, money saved in not having to employ an assistant, in total control of all your own work, and a dramatic increase in productivity.

Options Available:
- Angular accuracy: 1” (0.3 mgon), 2” (0.6 mgon), 3” (1 mgon), 5” (1.5 mgon)
- Prism Lock: ATR, PowerSearch
- PinPoint (Non Prism): R400 / R1000

Key Facts:

Angular Measurement
- Display resolution: 0.1” (0.1 mgon)
- Compensation: Centralized dual axis compensator

Distance Measurement
- Prism Range: Up to 5400m
- Standard Accuracy: 1 mm + 1.5 ppm
- PinPoint Non Prism Accuracy: 2 mm + 2 ppm
- Display resolution: 0.1 mm

General
- Magnification: 30 x
- Free objective aperture: 40mm
- Operating Time: 5 – 8 h (GB221)

Reconditioned TPS1200 Packages are also available please call us on 01189 820 500

Leica Viva TS15 Total Station
The Leica Viva TS15 is a state-of-the-art total station that provides advanced imaging functionality combined with dynamic tracking capabilities for one-person surveying or setting out.

Furthermore, Leica Viva TS15 features the easy-to-use Leica SmartWorx Viva onboard software. The Leica Viva TS15 adds a high resolution camera to further enhance total station productivity. In addition, the TS15 now also includes new grid scanning functionality. It is now easily possible to graphically define an area to be scanned on the total station view shown on the display. The total station will then rapidly scan the object to measure a true grid with survey accuracy.

Options Available:
- Angular accuracy: 1” (0.3 mgon), 2” (0.6 mgon), 3” (1 mgon), 5” (1.5 mgon)
- Prism Lock: ATR, PowerSearch
- PinPoint (Non Prism): R400 / R400 / R1000

Key Facts:

Angular Measurement
- Display resolution: 0.1” (0.1 mgon)
- Compensation: Quadaxial axis compensation

Distance Measurement
- Prism Range: Up to 5400m
- Standard Accuracy: 1 mm + 1.5 ppm
- PinPoint Non Prism Accuracy: 2 mm + 2 ppm
- Display resolution: 0.1 mm

General
- Magnification: 30 x
- Free objective aperture: 40mm
- Internal memory / Memory devices: 1 GB (nonvolatile NAND Flash) / SD card, USB stick
- Internal Battery: Internal Battery
- Operating Time: 5 – 8 h (GB221)
Leica Viva Imaging

Enrich your Surveying Workflow
The Viva TPS TS11 I and TS15 I Imaging Total Stations have been designed to include imaging functionality for Image Assisted Surveying and Documentation. Through high quality optics, images from 2 m to infinity are transferred as sharp images to a high resolution 5 Megapixel CMOS camera. A dedicated image processing board precisely calculates the exact exposure time and white balance settings for capturing optimal camera images of the total station live view. In order to support 20 Hz live streaming, new high-speed slip rings were designed and a state-of-the-art multimedia image processing unit was integrated to instantly transfer images from the telescope to the total stations high resolution VGA display.

Visualize
Overlay points and features directly on the live image to exactly see the survey data. Use the overlay to show position and visualize features to be set-out.

Sketch
Any new or captured image can be enhanced through sketching with any colour, line style and width to uniquely transfer valuable information.

Panorama
Simply define a region, or 360° view, and the total station will automatically stitch images into a panoramic view.

Image assisted Surveying
With live streaming of the total station view, simply tap on the display and the total station will turn and measure to the desired target. Immediately visualize measured objects as you go.

Please contact us to arrange a demonstration of a Leica Viva Imaging Total Station
Whether you want to stake-out an object on a construction site or you need accurate measurements of a tunnel, bridge or road; whether you want to carry out a topographic survey or calculate the volume of a stockpile – you need reliable and precise data. SmartWorx Viva is the answer.

• Viva software on all platforms,
  One common learning curve for Viva GPS & TPS
• Simple and modern graphics
• Clear graphical assistance within the applications
• Easy to understand & intuitive
• Improved ease of use & productivity
• Powerful Applications for any requirements
• Import: ASCII, DXF, LandXML
• Export: Custom ASCII, DXF, LandXML, FBK, RW5, RAW

Survey
• User definable screens
• Smart & Quick Coding
• On Screen Image Sketch Notes
• 3D Point Overlay (Imaging)
• Measure Hidden points with BT DISTO™

Stake-Out
• Select Points from Map/List
• Customise Stake-Out Screen
• Pick Control and Working Job to to keep data clean

DTM Stakeout
• Stakeout 3D Terrain Models
• See live cut & fill values

Reference Line
• Ideal for marking/surveying grids
• Staking of linear and area objects: Lines, arcs, areas and simple alignments
• Staking of slopes relative to lines and arcs

On-Board Volume Calculation
• Quick, Accurate in field calculation
• No need to return to office
• Grid scan on surface + volumes application
• Dedicated applications to measure surfaces of an undefined shape (e.g. gravel hill)
• Comprehensive reporting / cut sheets

Survey Cross Sections
• Define automatic coding of a cross section
• Ideal for measuring road, rail or river cross sections where repetitive coding is needed

Traverse (TPS only)
• Measure, compute and adjust traverses including survey observations

Sets of Angles (TPS only)
• Measure multiple rounds of angles and distances
• Ideal application when many repeated measurements to the same targets are needed – dams, quarries, building facades etc

TPS Hidden Point (TPS only)
• Allows hidden points to be measured with a total station using a hidden point rod
• Ideal application for measuring into catch pits, drainage lines and other inaccessible places

Reference Plane / Face Scan
• Ideal application for building facade or quarry face measuring

RoadRunner – Road, Rail, Tunnel
• Ideal applications to specifically handle the demands of complex alignment based projects
• Clear graphical displays allowing the user full field data control

Other applications are available please contact us to discuss any requirements you may have.
The Leica TM30 is designed to meet the highest accuracy standards. High precision measurements, combined with automatic, fast and silent operation ensures that the TM30 detects the smallest movement in all monitoring applications. This powerful combination of speed and accuracy allows engineers to effectively and cost efficiently measure and control the health of vital infrastructure. The combination of SmartEye vision technology and unique direct drive technology provides faster, more precise and longer range measurements than ever before.

**Continuous operation**
The TM30 meets the challenge of 24 hours, 7 days a week monitoring applications. It is designed to withstand the roughest use in the most severe environments. The TM30 will operate throughout a wide temperature range and is protected against wind driven rain, sand and dust. The sensor is fully operational in bright sunlight and complete darkness.

**Zero Noise Pollution**
to install the TM30 in urban areas

**Long Service Intervals**
Theft protection and keyboard lock

**Long Range ATR**
Up to 3000 m with 7mm accuracy

**Target View**
Narrows the field of view to detect the correct prism out of multiple prisms

Leica GeoMoS
Combine with GeoMoS software and other sensors to provide the complete monitoring solution.

**Leica TM30 accuracy – the facts:**

- **Angular accuracy – 0.5° or 1°**
- **Pinpoint EDM accuracy**
  - 0.6 mm ± 1 ppm to prism
  - 2 mm ± 2 ppm to any surface
- **Automatic Target Recognition (ATR) accuracy – 1”**

Leica GeoMoS

Please call 01189 820 500 for more information on the Leica TM30 & TS30 instruments

The Leica TS30 total station is unique. This total station redefines precise surveying by offering unmatched accuracy and quality. Never again will surveyors with demanding tasks need to make compromises, the TS30 total station is ready for any challenge. The TS30 is designed for when only 0.5” accuracy is acceptable.

**Pride in accuracy**
Surveyors take great pride in accuracy. The Leica TS30 delivers impressive performance in individual disciplines. But most importantly it is a champion in perfectly combining angle measurement, distance measurement, automatic target recognition and motorisation. The accuracy of the Leica TS30 is in a league of its own, a true companion for surveyors with pride.

**Leica TS30 accuracy – the facts:**

- **Angular accuracy – 0.5”**
- **Pinpoint EDM accuracy**
  - 0.6 mm ± 1 ppm to prism
  - 2 mm ± 2 ppm to any surface
- **Automatic Target Recognition (ATR) accuracy – 1”**
- **World’s best Dynamic Tracking Performance**
  New direct drives using Piezo technology were developed specifically for the TS30 to achieve maximum acceleration and speed whilst still retaining accuracy.
- **Fastest Start-to-Finish Workflow**
- **Long service intervals**
  Leica TS30 is designed to withstand the roughest use in the most severe environments. It will operate throughout a wide temperature range and is protected against wind driven rain, sand and dust. The TS30 can operate for extremely long intervals without suffering from wear and tear.

**Performance that counts**
Achieving both high performance and high accuracy is challenging. The Leica TS30 has reached a level of performance, whereby high accuracy surveying can be achieved in an easy, fast and reliable way, regardless of the project demands.
The Leica Automatic Deformation Monitoring System

Each monitoring project has specific measurement and accuracy requirements. The Leica GeoMoS software provides a highly flexible automatic deformation monitoring system that is able to combine geodetic, geotechnical and meteorological sensors to match the needs of your monitoring project, whether it is large or small, temporary or permanent.

Multi-Purpose
Leica GeoMoS is a multi-purpose automatic deformation monitoring software that can be used for:

• Structural deformation monitoring (e.g. dams, tunnels, bridges, high-rise buildings, construction)
• Landslide and settlement detection (e.g. mining, rock falls, volcano slopes, subsidence)
• Automated surveys (e.g. continuous, automated measurements)
• And many more...

Scalable and flexible
The Leica GeoMoS software is comprised of two main applications called Monitor and Analyzer.

Leica GeoMoS Adjustment is an add-on software that allows the user to make decisions based on statistically optimized and validated data.

• Monitor is the online application responsible for the sensor control, collection of data, computation and event management.
• Analyzer is the offline application responsible for the analysis, visualization and post-processing of the data.
• Adjustment is the application responsible for the network adjustment, deformation analysis and network simulation.

Leica GeoMoS stores all measurements and results in an open SQL database. The data can be accessed both locally and remotely, using Leica GeoMoS Analyzer, Leica GeoMoS Adjustment or third party software.

The Leica GeoMoS software is highly customizable allowing you to purchase only the functionality you require. The sensor license concept means that the software scales with the number and type of sensors you have connected. Additional functionality can easily be added later should your needs change.

Sensor Connections
Leica GeoMoS offers the ability to connect geodetic (Total Stations and GNSS sensors) and geotechnical sensors to understand the reasons of any detected movement and to improve the prediction of failure.

• Total Stations: Leica TS15, TM30, TS30, TPS1100, TPS1200, TPS1200Plus, TCA1201M, TPS1800 and TCA2003 Series
• GNSS sensors: Leica GS10, GR10, GPS System 1200, GMX900 Series, GPS System 500
• Connection to Leica GNSS Spider for advanced GNSS monitoring
• Levels: Leica DNA and Leica Sprinter
• Tilt sensors: Leica Nivel20 and Nivel200 Series
• Meteorological sensor (e.g. temperature, pressure)
• An interface to Campbell Scientific dataloggers, that can support most commercially available geotechnical sensors to measure environmental effects and conditions (e.g. extensometers, piezometers, strain gauges, inclinometers, thermometers, barometers, rain gauges, and many more)

Leica GeoMoS stores all measurements and results in an open SQL database. The data can be accessed both locally and remotely, using Leica GeoMoS Analyzer, Leica GeoMoS Adjustment or third party software.

The Leica GeoMoS software is highly customizable allowing you to purchase only the functionality you require. The sensor license concept means that the software scales with the number and type of sensors you have connected. Additional functionality can easily be added later should your needs change.

Communication
Leica Geosystems offers communication solutions via the new Leica M-Com series or standard accessories. The Leica M-Com series offers easy installation, reliable communication and the connection of multiple sensors and external devices.

In addition to the traditional serial based communication Leica GeoMoS also includes a direct TCP/IP communication interface to support Ethernet technology and mobile networks.

Please call us on 01189 820 500 for more information on Leica GeoMoS Monitoring Solutions and how they can work for your project.
Leica Viva Controllers

The CS10 and CS15 Leica Viva are the ideal partner for Leica Total Stations and GNSS instruments. They can be combined with both TPS and GNSS instruments to provide a fully integrated seamless surveying system partnered with Leica SmartWorx Viva surveying software, data collection has never been so easy.

Leica Viva CS10 Controller

Simply productive surveying software
With clear graphics, non-technological terminology and simplified workflows SmartWorx Viva is incredibly easy to use.
- Survey, coding and line work
- Advanced coordinate system handling
- Wide range of apps for all surveying and staking tasks

Built for the field
Designed for extreme environments, you can always rely on your CS10 & CS15. Comfortable in the hand, and easy-to-use for all tasks.
- IP67 and operating temperature -30 to 60° C
- Tactile, fully illuminated, rubber keypad (numeric on CS10, alphanumeric QWERTY on CS15)
- 2 Megapixel camera (perfectly placed for taking pictures when in hand or mounted on pole)
- Colour, VGA touch screen, illuminated

Flexible communication and data handling
Stay connected with a wide range of communication and data storage options.
Your CS10 & CS15 is ready for all challenges.
- Fully integrated wireless Interna technology (Bluetooth®, WLAN, TPS Radio)
- Choice of 2 connector modules

Lemo module: Lemo (USB and serial), USB A host, 7-pin connector, power
RS232 module: RS232, USB A host, USB mini AB OTG, 7-pin connector, power
- Data storage using ED Card, CF Card, USB memory stick

3G Modem
The Viva CS10 3.5G and CS15 3.5G field controllers can be supplied with a fully integrated high-speed 3.5G modem to connect to RTN, reference networks and allow mobile broadband internet connectivity for field-to-office data transfer.

Work how you like
Designed as part of the Leica Viva series, but versatile to work with many instrument and software combinations.

Total Stations and GNSS sensors
- Ideal for use with all Leica Viva Series
- Perfectly designed to be used with SmartWorx Viva surveying software
- Powerful ARM core processor for many software applications

Leica Viva CS15 Controller

26 alpha-numeric keys

Full 65 key QWERTY keyboard

Model | Price
---|---
CS10 GNSS | From £2,750.00
CS10 3.5G GNSS WLAN | From £3,495.00
CS10 TPS/GNSS WLAN | From £3,495.00
CS10 3.5G GNSS WLAN | From £3,495.00

Model | Price
---|---
CS15 GNSS | From £2,995.00
CS15 3.5G GNSS WLAN | From £3,495.00
CS15 TPS/GNSS WLAN | From £3,495.00
CS15 3.5G GNSS WLAN | From £4,295.00

Leica CS25 - Take the Office to the Field

State of the art technology
The Leica CS25 is equipped with state of the art technology, running a Windows® 7 Ultimate OS allows you to trade in your desktop PC for a rugged tablet, having it with you wherever your work is.
- 17.8 cm/7 inch sunlight readable touchscreen
- 64 GB SSD hard drive, eliminating internal moving parts
- Integrated GPS, 3G modem, WiFi and Bluetooth®
- Ultra-rugged design – IP65, MIL-STD-B10G

Built for the field
Designed for extreme environments – ultra-rugged, reliable and light-weight.
- Built for the most demanding field environments but nevertheless light-weight and compact
- Built to operate in extreme temperatures
- All-day-batteries, easily hot-swappable

Designed for versatility
Integrate the Leica CS25 tablet computer into the Leica Geosystems family of mobile solutions. Choose the field software, GNSS accuracy and the setup (pole or backpack) to suit your workflow and budget.
- Ready-to-use with Leica Zeno Field, Leica MobileMatriX (for GNSS as well as TPS)
- Ready-to-use with the Leica GNSS SmartAntenna – the Leica Zero GG02plus
- Use Leica Zeno Connect to embed custom applications into Leica CS25 and Leica Zeno GG02plus

Model | Price
---|---
CS25 Ruggedized Win7, P.O.A.

Controller Accessories Page 84 | Batteries Page 80 | Chargers Page 81

E sales@surveyequipment.com T 01189 820 500
Leica Viva GS08 NetRover

Leica Viva GS08 integrates the latest technology from Leica Geosystems, the world’s leading measurement solutions provider. All the components of Viva NetRover work seamlessly together, creating a lightweight and cable-free network rover.

**Turn-on & Measure**

Leica Viva NetRover helps you to complete your measurement tasks. Just turn-on and a connection is made to your local reference network. With full support of RTCM 3.1 transformation message, positions are automatically supplied in local coordinates. Viva NetRover is always ready to measure!

**Quick to learn**

We know you want easy to use software. We therefore designed SmartWorx Viva LT with simplicity in mind using clear graphics, logical menu structures, non-technical terminology and simplified workflows. You and your field crews will be up to speed in a minimum of time.

**Designed for networks**

The future proof GNSS receiver provides best in class network performance. The field controller includes 3.5G mobile broadband for high-speed connection to the reference network, internet and your office. Work with confidence in your equipment and maximise your productivity.

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**Leica Viva GS08 NetRover**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Channels</td>
<td>72 channels</td>
</tr>
<tr>
<td>Satellite Tracking</td>
<td>GPS &amp; Glonass</td>
</tr>
<tr>
<td></td>
<td>Horizontal: 5 mm + 0.5 ppm</td>
</tr>
<tr>
<td>RTK Static Mode</td>
<td>Horizontal: 5 mm + 0.5 ppm (rms)</td>
</tr>
<tr>
<td></td>
<td>Vertical: 10 mm + 1 ppm (rms)</td>
</tr>
<tr>
<td>RTK Moving Mode</td>
<td>Horizontal: 10 mm + 1 ppm (rms)</td>
</tr>
<tr>
<td></td>
<td>Vertical: 20 mm + 1 ppm (rms)</td>
</tr>
<tr>
<td>Data Storage</td>
<td>1 GB internal flash, SD-card slot, CF-card</td>
</tr>
<tr>
<td>Environmental Specification</td>
<td>IP67</td>
</tr>
<tr>
<td>Operation Time</td>
<td>7 hours</td>
</tr>
<tr>
<td>Battery Charging</td>
<td>2 Hours</td>
</tr>
<tr>
<td>Weight of pole setup</td>
<td>2.80 kg</td>
</tr>
</tbody>
</table>

---

**Leica Viva GS08 NetRover**

£10,995

Inc SmartNet Low User Licence & Sim Card

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**Leica Viva GS10**

Leica Viva GS10 – Versatile, Rugged and Precise

The Leica GS10 gives any user the complete flexibility of a powerful modular solution without compromising on performance. Systems can be customised to suit individuals needs such as long term installations.

**Proven GNSS technology**

Built on years of knowledge and experience, the Leica GS10 delivers the hallmarks of Leica GNSS – reliability and accuracy.

- SmartCheck – RTK data-processing to guarantee correct results
- SmartTrack – advanced four constellation tracking of all GNSS satellites today and tomorrow
- SmartRTK – delivers consistent results in all networks

**Work as you want to**

The Leica GS10 is designed to suit any surveying task.

- Exchangeable communication devices for field base stations and RTK rovers with removable SIM cards
- Fully scalable sensor allows you to buy only what you need today and upgrade with additional functionality as you need it
- Integrated web server to configure the logging of Leica or RINEX raw data and measure with one button press in the field

**Rugged**

The Leica GS10 is built for the most demanding environments.

- IP67 protection against dust and immersion to 1m
- Built for extreme temperatures of -40°C to +65°C

---

**Please call for more information and pricing**

E sales@surveyequipment.com

T 01189 820 500
Leica Viva GS12 offers complete freedom of choice. From a GNSS Rover up to an integrated GNSS solution with a Leica Viva Total Station (Leica Viva SmartPole or Leica Viva SmartStation), the GS12 provides a solution to all applications.

Proven GNSS technology
Built on years of knowledge and experience, the Leica GS12 delivers the hallmarks of Leica GNSS – reliability and accuracy.

- SmartCheck – RTK data-processing to guarantee correct results
- SmartTrack – advanced four constellation tracking of all GNSS satellites today and tomorrow
- SmartRTK – delivers consistent results in all networks

Light Weight and full functionality
The Leica GS12 delivers ultimate ergonomics through extreme light weight.

- Weight of only 1kg for ergonomic handling with ideal balance
- Full GNSS compatibility: GPS, GLONASS, Galileo and Compass
- Fully scalable sensor allows you to buy only what you need today and upgrade with additional functionality as you need it

Rugged
The Leica GS12 is built for the most demanding environments.

- IP67 protection against dust and immersion to 1m
- Built for extreme temperatures of -40°C to +65°C
- Withstands 2m pole topple over test
- Complete cable free operation

GNSS Technology

<table>
<thead>
<tr>
<th>Number of Channels</th>
<th>120 channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satellite signals tracking (future)</td>
<td>Galileo, Compass</td>
</tr>
</tbody>
</table>

Measurement Performance

<table>
<thead>
<tr>
<th>RTK Rapid static (phase)</th>
<th>Horizontal: 5 mm + 0.5 ppm (rms) Vertical: 10 mm + 0.5 ppm (rms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Static mode after initialization</td>
<td></td>
</tr>
<tr>
<td>RTK Kinematic (phase)</td>
<td>Horizontal: 10 mm + 1 ppm (rms) Vertical: 20 mm + 1 ppm (rms)</td>
</tr>
<tr>
<td>Moving mode after initialization</td>
<td></td>
</tr>
<tr>
<td>Real-Time Processing (phase)</td>
<td>Horizontal: 3 mm + 0.1 ppm (rms) Vertical: 3.5 mm + 0.4 ppm (rms)</td>
</tr>
<tr>
<td>Static with long observations</td>
<td></td>
</tr>
</tbody>
</table>

Leica Viva GNSS is a complete range of versatile GNSS solutions for you. From completely integrated, to totally modular solutions; Viva GNSS provides a system to master all of your tasks.

Proven GNSS technology
Built on years of knowledge and experience, the Leica GS15 delivers the hallmarks of Leica GNSS – reliability and accuracy.

- SmartCheck – RTK data-processing to guarantee correct results
- SmartTrack – advanced four constellation tracking of all GNSS satellites today and tomorrow
- SmartRTK – delivers consistent results in all networks

Work as you want to
The Leica GS15 is designed to suit any surveying task.

- Exchangeable communication devices for field base stations and RTK rovers with removable SIM cards
- Fully scalable sensor allows you to buy only what you need today and upgrade with additional functionality as you need it
- Integrated web server to configure the logging of Leica or RINEX raw data and measure with one button press in the field

Rugged
The Leica GS15 is built for the most demanding environments.

- Triple Frequency – GPS, Glonass, Galileo
- 120 Channels
- Leica patented SmartTrack+ technology
- Minimum acquisition time
- Excellent low elevation tracking
- Leica SmartNet Compatible
- Minimum acquisition time
- IP67 Protection
- On-Board Raw Data Logging
- Removable SD Card
- Fully Integrated UHF/GPRS modem
- Hot Swappable Batteries

Leica GS12 SmartRover From £14,995.00
Leica GS15 – Integrated Performance GNSS Receiver
Item | Price
---|---
Leica Viva GNSS SmartRover | From £14,995.00
Leica Viva GNSS Base & Rover | From £26,995.00
Do you need fast, accurate, traceable and reliable OS Co-ordinates? If so then Leica SmartNet is the correction service for you. SmartNet is available to anyone with any make of GPS/GNSS receiver that can accept RTK or DGPS corrections broadcast by GSM or GPRS (Mobile phone Internet).

What is SmartNet?
SmartNet is basically a 24/7, accurate, reliable, robust, traceable and repeatable National GPS Network solution, based on a common datum, for the entire positioning community of Great Britain & Ireland. Users of SmartNet can expect centimetre level Network RTK accuracies, through to sub-metre DGPS; or raw data for post processing.

Typical Applications:
- Surveying & Engineering
- Utility Mapping & Archaeology
- Construction, Machine Control and Agriculture
- GIS, Asset Management

Leica SmartNet Benefits

**Quality**
- Same accuracy as a local base station
- High-speed initialisation for RTK solutions
- Redundancy – multiple reference stations, not just one
- Reliability – full mirroring of network services
- Quality assurance – Network integrity monitoring

**Productivity**
- Performs 1-3cm RTK surveys with one rover
- Eliminates daily base station set-up & potential errors
- Reduces dependency on ground control monuments
- Far exceeds range of conventional RTK systems
- Converts your existing base station into a productive rover

**Availability**
- “Always on” 24/7 monitored service
- Full backup systems
- Immediate SMS text updates on the status of OSNet, OSI & OSNI stations
- Free RINEX downloads from the SmartNet web site
- Allows subscribers to easily work in various locations

**Leica SmartNet Annual Subscriptions**
- £2,000.00
- £1,200.00

**GB DGPS Annual Subscriptions**
- £750.00
- £450.00

Leica GNSS Reference Networks
Reference station solutions are ideal for long term installations on site providing all your GNSS positioning requirements. Correction data can be simply distributed to all users such as surveyors, engineers and machines across site maintaining a precise control network and keeping costs down.

**Leica GR25**
The Leica GR25 is a next generation GNSS reference station platform going far beyond traditional Reference Station receivers, serving many purposes and applications. With integrated internal and external device management, multi-user management, high end security, modular and scalable design, the new GR25 GNSS Reference Server will grow with your needs and keep your GNSS applications and networks fully up to date.

Designed for numerous permanent and semi-permanent GNSS network installations and monitoring applications. Including RTK and static networks, single base station, field campaigns, structural monitoring, atmospheric and seismic studies and offshore positioning.

Please call for more information regarding Reference Networks

**Leica GR10**
Leica GR10 is a next generation GNSS reference station receiver that combines the latest state-of-the-art technologies with a streamlined “plug and play” workflow. Designed for a wide variety of GNSS reference station applications, the Leica GR10 offers new levels of simplicity, reliability and performance. With a focus on ease of use and efficiency, the GR10 helps streamline day to day operation and administration.

Proven GNSS technology
Leica GR10 is a next generation GNSS reference station receiver that combines the latest state-of-the-art technologies with a streamlined “plug and play” workflow. Designed for a wide variety of GNSS reference station applications, the Leica GR10 offers new levels of simplicity, reliability and performance. With a focus on ease of use and efficiency, the GR10 helps streamline day to day operation and administration.

Please call for more information regarding Reference Networks

**Leica SmartNet**

Leica G25
The Leica G25 is a next generation GNSS reference station platform going far beyond traditional Reference Station receivers, serving many purposes and applications. With integrated internal and external device management, multi-user management, high end security, modular and scalable design, the new G25 GNSS Reference Server will grow with your needs and keep your GNSS applications and networks fully up to date.

Designed for numerous permanent and semi-permanent GNSS network installations and monitoring applications. Including RTK and static networks, single base station, field campaigns, structural monitoring, atmospheric and seismic studies and offshore positioning.

Please call for more information regarding Reference Networks
Leica GIS Solutions

With innovative and integrated solutions whatever your GIS requirements we can supply a solution to meet your needs, both hardware and software.

Leica Viva Zeno 10/15
Simplicity in your own hands
The Leica Zeno GIS series offers an ideal set of tools for anyone who needs more accurate data in a GIS database. All GNSS post-processing is automated; GIS and GNSS technologies are seamlessly combined in one easy solution.

Simplicity in your own hands
High quality measurement engine and proven antenna technology provide the highest quality measurement data.
- L1 GPS, GLONASS, SBAS sensor
- Post-processing accuracy 5 mm + 0.5 ppm (2D)
- DGPS accuracy <0.4 m
- Leica MDB and RINEX raw data logging

Leica GIS Software

Zeno Field
Leica Zeno Field is an OEM version of ArcPad 10 and provides in addition to the well known ArcPad™ functionality: GNSS raw data logging, easy handling of GNSS configurations (such as DGPS settings), feature accuracy management and an automated workflow between the field and office. Together with Zeno Office easily manage feature quality over time and benefits from automated import and export functions to a wide range of different formats such as ArcGIS geodatabase, shapefile, dxf, dgn, and dwg.
- ArcPad 10 OEM integrated, with fast visualization & drawing speed
- Real-Time differential correction made easy
- Logging of raw data for post-processing to increase accuracy
- State-of-the-art field mapping tools
- Various field controller supported
- Full support for Zeno 1D/15’s internal camera
- QuickCapture toolbar for simple use

Zeno Connect
Integrate Leica hardware with 3rd party Software to receive NMEA messages from the Zeno SmartAntennas to provide your own custom solution.

Features & Functionality
- Configure RTK, stream RTK NMEA from GS05/06, GG01 and GG02plus

Leica Zeno Office
Leica Zeno Office on ArcGIS™ provides a set of tools for managing and processing GNSS and surveying data within ArcGIS Desktop, all from directly within your familiar environment. Leica Zeno Office is a software package to maintain, manage and post-process GIS, GNSS and surveying data. With Leica Zeno GIS you get much more done in a busy day and have full trust in the accuracy of your GNSS data.
- Automated field-office workflows: EasyIn and EasyOut
- Store detailed GNSS quality information in a GIS database
- Integration of surveying measurements in a GIS database

Leica MobileMatrixX – Mobile Mapping and Data Collection Software
Leica MobileMatrixX is a field solution for the interactive processing, visualization and maintenance of feature and survey data. Leica MobileMatrixX directly integrates survey related data collection and processing functionality into ArcGIS®. Leica MobileMatrixX is the perfect software for feature data collection and management and computation and storage of survey data based around the geodatabase from ESRI.
- Geodesy and Land Surveying
- Utility market and Power Supply Industry
- Forestry and geologic mapping
- Agricultural Mapping
- Environmental Data collection
- Map Completion

Please call us on 01189 820 500 for more information on Leica GIS products
Pacific Crest Radios

**ADL Vantage**
Advanced high speed wireless data link built to survive the rigours of GNSS/RTK surveying and precise positioning:
- Multi-function user interface
- Configurable Transmit Power: 0.1-4.0 Watts
- Heavy-Duty Construction
- High Over-the-Air Link Rate
- Configurable Transmit Power
- Advanced 40 MHz Bandwidth
- Software-Derived Channel Bandwidth

**ADL Vantage Radio from £1,070.00**

**ADL Vantage Pro**
This sophisticated 35 Watt radio utilizes Pacific Crest’s latest generation Advanced Data Link (ADL) technology while remaining backward compatible with existing Pacific Crest, Trimble and other radios:
- Configurable Transmit Power from 2-35 Watts
- Multi-function user interface
- Heavy-Duty Construction
- Fully water- and dustproof
- 19200 Over-the-Air Link Rate without range degradation
- Advanced 40 MHz Bandwidth
- Software-Derived Channel Bandwidth

**ADL Vantage Pro Radio from £2,195.00**

**ADL Uplink**
The ADL Uplink combines a ruggedized handheld computer with a software program that automatically downloads Internet-based RTK corrections and streams them to a radio for rebroadcast into areas of poor cell coverage:
- Repeats NTRIP GNSS Network data in combination with radio
- Nomad computer and PCC software
- Fully automated operation
- Extends GNSS Network coverage using radios
- Solution for locations with weak cell phone coverage
- Offers solution to cut Cell phone cost

**ADL Uplink System from £2,990.00**

---

If you would like to discuss any Pacific Crest product in more detail please call us.

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Pacific Crest Accessories

**ADL Vantage ADL Battery / Charger Kit**
- Battery, bag, tripod clip + connector wire
- 9’ SAE-to-SAE cable
- Charger, 12V, 3A
- Charger power cord and plug adaptors
- Battery manual
- Charger manual

**Price £290.00**

**ADL Vantage Field Accessory Kit Includes:**
- Battery, bag, tripod clip + connector wire
- 9’ SAE-to-SAE cable
- Charger, 12V, 3A
- Charger Power Cord and plug adaptors
- Battery manual
- Charger manual
- NMO-to-TNC adaptor Cable (9 ft )
- Tripod Clip for radio
- Radio/cable carrying case with strap

**Price £420.00**

**ADL Vantage - Tripod with Bag**

**Price £300.00**

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### Part Number | Price
---|---
Elevated Feed Antenna, Unity Gain, NMO connector, 18”/45.7cm | £65.00
Elevated Feed Antenna, 5 dB Gain, NMO connector, 38”/96.5cm | £83.00
High-Gain Antenna Kit - 5 dB gain antenna + Antenna transport quiver | £115.00
Elevated Feed Antenna Cable (TNC to NMO) 2.8 m / 9 ft | £65.00
Elevated Feed Antenna Cable (TNC to NMO) 8 m / 25 ft | £115.00
1/2-Wavelength TNC-M Duck Antenna, 8.5”/21.6cm | £28.95

---

We can supply the full range of Pacific Crest Accessories. Please contact us for further information.
Fully understanding construction carried us beyond the ordinary. Leica iCON is more than a new product line and a software package, it enables you to enhance your performance, and increase your profitability through perfecting your construction workflow.

**iCON Instruments:**

- **Leica iCON robot 50**
  - One-person operation, saving time and increasing productivity when carrying out layout tasks and as-built checks.
  - One-button keyboard for simple operation
  - Unique PowerSearch option for fast prism acquisition
  - Ready to use in 3D machine control
  - Easy hand-over control from rover to machine control and vice versa
  - Available in 2”, 5” versions
  - PowerSearch option
  - 250m option (reflectorless)

- **Leica iCON_gps 60**
  - Versatile Smart Antenna for multi-purpose positioning tasks.
  - No controller required for base station set-up means you need less hardware.
  - Future-proof satellite tracking. Works with all existing and future satellite systems.
  - Unique communication flexibility, featuring integrated radio, modem and Bluetooth®
  - Multi-purpose GPS solution. Can be used as construction site GNSS Base, Rover or NetRover, in supervisor vehicle on site and entry level machine control mounted inside a machine.

- **Leica iCON CC60/61**
  - Rugged, mobile tablet PC with enhanced connectivity and functionality.
  - Ideal for larger graphic visibility
  - 7” display 1024x600 resolution
  - IP 65, -20°C to +65°C
  - Integrated BT & WLAN
  - L1 GPS

- **Leica iCON CC50**
  - Lightweight, handy PDA for easy and efficient field work.
  - Long-range Bluetooth® up to 350m
  - Sunlight visible VGA display

- **Leica Builder Range**
  - For anybody working on or around a site with the need of a simple, intuitive, yet innovative, long-lasting and powerful measuring tool. From a basic theodolite to a reflectorless total station with wireless communication the Leica Builder range can fit all measuring tasks.

Please call us on 01189 820 500 for more information on the iCON and Builder instruments.

**iCON Software**

Improving your performance with intelligent software applications, workflow and an innovative user interface, iCON build’s intuitive user interface provides you with highest accuracy and flexibility for your daily tasks.

- Worlds simplest Construction Positioning interface
- Ergonomically designed for unmatched user experience
- Intuitive to use and navigate through
- Large easy to use buttons
- All information displayed graphically wherever possible
- Modern look and feel (Smart phone style)
- Optimized for easy viewing
- Import and Export data from generic file formats
- Easily move data between Field, Office and Machine

Available as either iCON Build or Site there is a software package which meets your needs which ever sector you work in.

**Feature Snap Shot:**

- **Sketching**
  - Build your digital copy of the design within seconds. Extend and modify existing data to the reality on site.

- **Layout**
  - Simply pick points, lines or arcs for your layout from the map screen.

- **As-Built**
  - Create as-built checks of structures for your records. Collect points, lines or arcs in one go with immediate graphical representation.

- **Volumes and Cut & Fill**
  - Measure surfaces and calculate volumes or check elevation.

Scan Me
Your Vision: one integrated Office Software with Leica Geo Office use the most powerful tools all integrated in one common software to finalize your work faster today and tomorrow.

One Office Software for all your instruments
Seamlessly import and combine data from all your instruments to produce the final results. Manage and combine your data with Leica Geo Office to ensure you get the best results.

- GNSS instrument support
- TPS instrument support
- Level instrument support

Best-in-class Processing Options
Years of experience in the fields of surveying and GNSS data processing resulted in the world’s most powerful processing options.

- GNSS data processing using SmartCheck techniques
- TPS processing – from simple station updates to complex traverses
- Level processing
- Combined network adjustments
- COGO calculations, Datum transformations and Volume calculations

All components integrated in one software
Leica Geo Office enables you to manage your project in an integrated way. No need to transfer data between the various modules.

- Use GNSS processing to automatically update SmartStation setups
- Combine GNSS and terrestrial data with an integrated Least Squares Adjustment
- Benefits from volume calculations being instantly updated whenever coordinates change
- Data management
- View and Edit
- TPS Processing
- Flexible Reporting
- Flexible Import and Export
- Tools for GPS, TPS and levels
- Coordinate transformations
- GNSS Post Processing
- Network Adjustment
- Surfaces and Volumes

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Module Description</th>
<th>Price</th>
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<tbody>
<tr>
<td>778066</td>
<td>Leica Geo Office TPS Bundle (Node locked). Includes LandXML Import/Export, COGO calculations and TPS data processing</td>
<td>P.O.A.</td>
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<tr>
<td>778067</td>
<td>Leica Geo Office GNSS RTK Bundle (Node locked). Includes LandXML Import/Export and COGO calculations.</td>
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<tr>
<td>778068</td>
<td>Leica Geo Office GNSS-PP Bundle (Node locked). Includes LandXML Import/Export, COGO calculations, L1/L2 GNSS processing, GLONASS, RINEX Import and Datum &amp; Map.</td>
<td>P.O.A.</td>
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<tr>
<td>778069</td>
<td>Leica Geo Office Level Bundle (Node locked). Includes Level processing and Adjustment 1D.</td>
<td>P.O.A.</td>
</tr>
<tr>
<td>778070</td>
<td>Leica Geo Office Professional Bundle (Node locked). Includes all options.</td>
<td>P.O.A.</td>
</tr>
</tbody>
</table>

Please note Leica Geo Office can be customised to suit your requirements. Please contact us for more details.
Geomatics Software from AiC

4Site
4Site Survey software for AutoCAD™ removes the tedium of extracting data from your survey equipment and transferring it into CAD to create drawings.
4Site Office [desktop] allows down loading, formatting and processing of survey data, whilst 4Site Survey links directly to your instrument for infield recording turning 4Site into an advanced digitiser. This allows you to take drawings out into the field, for setting out and comparisons with as built. All data is stored and processed internally in CAD.
Data appears on a Project Tree, like 4ce, for easy access and editing. A CodeTable, converts coded data into objects such as Points, Lines, Shapes, Blocks and Annotation.

Turn your Total Station into a digitiser, working in AutoCAD™!

Modelling and 3D Views in “4ce

“4ce Lite
As “4ce Survey with the addition of Graphical Editing, including Multi-Point and Feature Identification, DTM creation with Contours, Groups, Multi-Surface Sections, and Complex Prism Volumes and Isopachytes. Image Registration.
Point and Feature editing, including Delete, Move and Insert.
A 3D Viewer allows interactive visualisation of the DTM, with coloured Groups.
A simple CAD editor allow the creation of detail including finished Drawings with View Points using Paper Space and Model Space.
Bitmap Images, like logos and photos can be introduced to Drawings for final presentations.
Field to Finish solutions for site engineers and surveyors with limited needs.

£1250.00

“4ce Professional
As “4ce Lite with additional Design Tools for Model and CAD Editing, additional Sectioning and Volume options with Group Depths with Model Merging, Combining and Grid Models. Partitions with Key Plans.
Introducing Dedicated CAD Backcloths with Tables, Hatching, Dimensioning and other CAD functions for preparing professional presentations.
Point Height Text Filtering, point List and Design using Profile Templates; Bench and Batter; Densification and much more...
Applications for River Sections and Beach Surveys extends “4ce into a specialist design package.
Full of detail for the discerning user wanting advanced functionality and quality presentations.

£2250.00

“4ce Designer
As “4ce Professional with specialist applications for Geological Modelling, Earthworks, Mining, Rail Surveys from Trolleys with overlap checking and Offsets.
Bore Holes, Lidar & Grid Modelling, Alignment Design, Haul Roads, Surcharging, Cut/Fill Balancing with Bulking Factors & Trending.
Horizontal and Vertical Alignment Design. Ideal for Rail Survey Analysis, Pipelines and Road Layouts.
Multi-surface Modelling with draped aerial photography and 3D viewing. Visibility Analysis with zoned line of sight. Specialist LiDAR processing and editing tools.
Suited to Earthworks Contractors, Design Engineers and Rail Surveyors wanting precise quantities and specialist applications.

£2750.00

A true Geomatics Software Toolbox, with data at your finger tips!
Survey – For those who want to import and process their survey data and export it to third-party CAD software.
Lite – Includes powerful graphical editing options, including the ability to create DTM’s, contours and sections.
Professional – Uses advanced section and volume options, and advanced CAD editing tools to drastically speed up survey plotting.
Designer – Also adds specialist applications for Geological Modelling, Mining, Railways Surveys, Alignment Design and more.
I/O filters are available for all popular instruments formats including Leica, Pentax, Sokkia, Topcon and Trimble.

£550.00

“4ce Survey
“4ce Survey Import and process your survey data for exporting it to third-party software. Import your survey data from Total Stations and GPS directly in to “4ce.
LS Network Adjustment, Reduction & Error Checking Building Elevation Surveys.
Automatic feature generation from a Fullylayered database and user defined Code Table. Including Point, Line, Symbols, Shape and Text definitions. Spreadsheet and Graphics displays.Comma Codes, Dimensions, Helmert Co-ordinate Transformations and user-defined XYZ/CSV filters.
Transfer formats including Star*Net, AutoCAD™ DXF and Bentley MX™ GENIO.
Use Point Extraction from CAD for setting out from design drawings. An ideal partner to third-party Modelling or CAD packages.

£550.00

*4ce Used in Housing Layouts

“4ce Used in Housing Layouts

4Site AutoCAD™ Software

Full Layered Code Table and Project Tree

Full of detail for the discerning user wanting advanced functionality and quality presentations.

£1250.00
Cable Avoidance

In an ever more regulated industry, the next generation of Cable Avoidance Tools, C.A.T4™ and Genny4™, build on over 30 years of Cable Avoidance expertise to enable operators to find more buried utilities, faster.

Detect more, detect faster
The C.A.T4 Avoidance Mode™ lets the operator check an intended excavation area for Power, Radio and Genny4 signals, and pinpoint located utilities, in a single scan. The bargraph ‘tidemark’ enables the user to quickly spot and zero-in on a buried conductor.

The Genny4 provides a class-first simultaneous dual-frequency signal output. Alongside the familiar 33kHz signal for general purpose locates, the Genny4 transmits a specialised Small Diameter Locate signal for difficult locates, the Signal Boost function enables the C.A.T4’s calibration certificate on-demand.

Dig more safely
As a safety critical tool, C.A.T4 and Genny4 offer a number of features designed to support safe working and help to drive utility strike rates down. C.A.T4™ series units feature on-board data acquisition to aid in identifying training needs, while the SWING™ warning alerts the operator to incorrect usage patterns, encouraging corrective action.

All C.A.T4 units are equipped with Radiodetection’s proprietary eCert™ technology, which provides a comprehensive assessment of the unit’s hardware and software using an internet connection to Radiodetection, and can be used to extend the validity of the C.A.T4’s calibration certificate on-demand.

Data Acquisition / Logging
On-board memory allows over a year’s worth of data to be stored on eC.A.T4 series products. This data can be backed-up to a PC at any time, giving virtually unlimited record keeping for the life of the product. Retrieved data can be analysed, either locally or remotely, to aid in ensuring compliance and identifying training requirements. Records can be retrieved and collated helping to increase on site safety, whilst identifying training needs.

The EZiCAT i650 makes locating underground cables and pipes a simple and efficient task, increasing your onsite safety and ultimately saving time and money.

Factors logged include:
- Mode of use: Genny / Power / Radio signal strengths
- Date and time of survey
- StrikeAlert / SWING warning statuses
- Angle of use
- Audio status
- Bargraph readout
- Sensitivity control setting
- Depth measurements made
- Battery status
- Last / next calibration date
- Dynamic Overload Protection / signal overload status

Based on 8 hours use per day, 5 days per week.

Genny4
£445.00 £519.95

C.A.T4
£495.00 £569.95

C.A.T4+ £575.00 £649.95

Genny4+ £625.00 £699.95

Genny4+ £695.00 £769.95

C.A.T4+ £445.00 £519.95

Model Standard Unit With Strike Alert
C.A.T4 £495.00 £569.95
C.A.T4+ £575.00 £649.95
Genny4 £625.00 £699.95
Genny4+ £695.00 £769.95

E sales@surveyequipment.com
T 01189 820 500

Cable Avoidance

Cable Avoidance Tools, C.A.T4™ and Genny4™, build over 30 years of Cable Avoidance expertise to enable operators to find more buried utilities, faster.

Factors logged include:
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Genny4 £625.00 £699.95
Genny4+ £695.00 £769.95

E sales@surveyequipment.com
T 01189 820 500

Cable Avoidance
Radiodetection RD7000

A broad range of standard active frequencies and rugged construction make the RD7000+ a reliable and versatile locator. The RD7000+ range delivers exceptional pipe and cable location and tracing functionality, even in electrically noisy areas.

Featuring Compass™ and dynamic overload protection, all models are compatible with the complete range of RD7000 and RD8000 frequencies in both inductive and direct connect modes. The transmitters use 8 D-cell batteries and can be powered from a vehicle using a 12V cable plug (it is recommended that an approved Radiodetection isolation transformer is used).

As an additional feature, each model has a multimeter function providing measurement of output voltage, line voltage, current, impedance and power.

Available in 4 models:
- RD7000 SL+ for Construction
- RD7000 DL+ for Water Industry
- RD7000 PL+ for Power Industry
- RD7000 TL+ for Telecoms Industry

Available in 3 Models:
- TX-1 (with or without iLOC™)
  1 Watt Transmitter
- TX-3 (with or without iLOC™)
  3 Watt Transmitter
- TX-10 (with or without iLOC™)
  10 Watt Transmitter

Rechargeable battery packs available for all models

Available in 2 models:
- RD8000 PXL
- RD8000 PDL

Precision Location RD8000

Delivering fast, accurate, reliable and repeatable locate data.

The RD8000™PDL and PXL are powerful multifunctional pipe and cable locators designed for use across the pipe and cable location industry. With several unique features, the RD8000™ delivers speed, accuracy and reliability, yet remains a cost-effective solution for any application. Designed with the latest digital architecture and software, RD8000™ delivers a highly accurate, controllable and reliable locate solution to service any industry, anywhere in the world.

Key Features:
- Ergonomics
  - Light weight – 28% lighter than industry standard RD4000
  - IP54 Rating – you can operate it in almost any environment
  - Transmitter and receiver feature a large, high contrast backlit LCD screen

- Compass™
  - Over 50 software and hardware patents
  - Combination of new and innovative algorithms with established software on a high-performance processor core
  - Improves the accuracy and repeatability of measurements
  - Delivers powerful signal filtering and analysis allowing continued operation even in the most electrically noisy environments

- iLOC™
  - iLOC™ is an advanced Bluetooth® link between the RD8000 locator and transmitter
  - iLOC allows the operator to control the transmitter remotely
  - Less time walking and more time locating

- eCAL™
  - A Radiodetection technique that allows the operator to validate the original factory calibration of the RD8000
  - eCAL can issue and print validation certificate without needing to return the RD8000 to a service center

- TruDepth™
  - Accurate depth readings only indicates a locate depth when the locator is correctly oriented directly above the pipe/cable

Available in 2 models:
- RD8000 PXL
- RD8000 PDL

Radiodetection's most advanced cable and pipe locator delivers a broader range of frequencies and sophisticated fault-finding capabilities. It has all the features of the RD8000PXL and a larger range of active and passive frequencies (including CATV and CPS) plus Current Direction (CD), and Fault Find (FF) modes.
Cable Avoidance

Radiodetection C.A.T®

C.A.T® (Cable Avoidance Tool) is an advanced cable avoidance tool delivering world class performance from a powerful digital processing platform. It can detect signals naturally radiating from metallic services, or the Genny® can be used to apply a distinctive signal that the C.A.T® can detect.

The Radiodetection C.A.T.3 and Genny3 has become the industry standard pipe and cable avoidance tool, recognized as the leader across all industry segments providing performance, ruggedness and reliability, together with affordability and low cost of ownership.

Key features

- Precision locate – Improved pinpointing of buried services and exceptionally fast sound and meter response.
- Optimized locate – Operates effectively in congested sites, and sites with overhead cables.
- Avoidance Scan – Search in Power, Radio and Genny modes simultaneously for improved safety and faster surveys.
- Strike Alert – Alerts the user to shallow power cables by flashing an alert icon.

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>C.A.T Only</td>
<td>£515.00</td>
<td>£425.00</td>
<td>£495.00</td>
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<tr>
<td>Genny Only</td>
<td>£425.00</td>
<td>£425.00</td>
<td>£425.00</td>
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<tr>
<td>C.A.T &amp; Genny Kit (includes bag)</td>
<td>£895.00</td>
<td>£895.00</td>
<td>£925.00</td>
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<tr>
<td>C.A.T³+ Builders Kit (includes bag)</td>
<td>£1,375.00</td>
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<td>£1,470.00</td>
</tr>
<tr>
<td>C.A.T³+ Electricians Kit (includes bag)</td>
<td>£1,260.00</td>
<td>£1,260.00</td>
<td>£1,335.00</td>
</tr>
</tbody>
</table>

The Genny can be used to apply a distinctive signal that the C.A.T can detect.

Radiodetection Genny®

Sones

Self contained transmitters for locating underground pipes and conduits can be connected to Drain Rods or Cobra Reels. 6 Models with three choices of locate frequencies.

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Sonde 33kHz</td>
<td>£234.00</td>
<td></td>
</tr>
<tr>
<td>Slim Sonde [Mighty Mouse]</td>
<td>£296.00</td>
<td></td>
</tr>
</tbody>
</table>

Signal Clamps

Used to apply signal to pipe or cable without need to disconnect or interrupt supply.

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Signal Clamp (50mm)</td>
<td>£186.00</td>
<td></td>
</tr>
<tr>
<td>Standard Signal Clamp (100mm)</td>
<td>£186.00</td>
<td></td>
</tr>
<tr>
<td>Signal Clamp Extension Rod</td>
<td>£22.00</td>
<td></td>
</tr>
</tbody>
</table>

Cobra Rods

Can be used in-conjunction with a sonde for tracing available in 9mm or 11mm Diameter Rod and are supplied complete with Wheel sets for ease of transportation.

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini Frame 4.5mm 30,50,100m</td>
<td>From £110.00</td>
<td></td>
</tr>
<tr>
<td>Ferret Frame 6mm 30 to 120m</td>
<td>From £149.00</td>
<td></td>
</tr>
<tr>
<td>Compact Frame 9mm 50 to 100m</td>
<td>From £200.00</td>
<td></td>
</tr>
<tr>
<td>Large Frame 11mm 100 to 250m</td>
<td>From £345.00</td>
<td></td>
</tr>
</tbody>
</table>
The EZiCAT 500i and 550i represent the latest design in cable location technology. With state-of-the-art digital signal processing (DSP) and intelligent software, the EZiCAT i-Series locators make ground surveys a simple and speedy task; increasing onsite safety and ultimately saving time and money.

EZiCAT 500i locator
With its automatic controls and combined detection mode “Auto Mode” the EZiCAT 500i locator has been specifically designed to reduce human error during the location process. Combined with its precise and reliable service positioning, the EZiCAT 500i will prevent damage to underground services during excavation projects. Active signal tracing is available when using the EZiTRACE 8/33 signal generator.

£485.00

EZiCAT 550i locator
Contains the same functionality as the EZiCAT 500i, however it offers the added benefit of service depth estimation, when used in conjunction with the Digitex 8/33 signal generator or Sonde in 8/33 kHz mode.

£525.00

Bluetooth Technology
The EZiCAT i-Series locators can be purchased with the added benefit of Bluetooth wireless connectivity, allowing them to integrate seamlessly with mobile mapping technology to log survey data.

EZiTEX t100 signal transmitter
Dual Frequency Signal Generator. Designed in conjunction with the EZiCAT locators, to easily and accurately trace the route of, or locate, an underground cable or metal pipe that does not carry a naturally present signal. The EZiTEX t100 generates a specific “active” signal, which can then be traced using any EZiCAT locator.

£450.00

Advanced buried service location technology
The new EZiCAT i600/i650 provides a unique data capture and on board memory function, allowing verification of the locators use and the ability to recall records following a near miss, service strike or similar incident. With the unique LOGiCAT Software, records can be retrieved and collated helping to increase on site safety, whilst identifying training needs. The EZiCAT i650 makes locating underground cables and pipes a simple and efficient task, increasing your onsite safety and ultimately saving time and money.

EZiCAT i600/i650 New Features
- Data Logging
  Both the EZiCAT i600 and i650 record and store detection information whilst in use. The locators start to record information every second after completion of the initial start-up routine. These records (logs) are stored in the locator’s memory and can be retrieved and transferred via Bluetooth to a PC for analysis. The locators are capable of storing approximately 80 hours of records.
- Bluetooth Wireless Connectivity
  Both the EZiCAT i600 and i650 locators have the added benefit of Bluetooth wireless connectivity. It allows the EZiCAT to integrate seamlessly with mobile mapping technology to log survey data, in addition to enabling wireless Bluetooth data transfer.
- Depth Indication (i650 only)
  When using the EZiCAT in conjunction with the EZiTRACE or Sonde in 8 or 33 kHz modes, operators can determine the depth of the buried utility, providing a clear advantage when conducting ground surveys.

EZiCAT Intelligent Features
- Automatic Controls
  Making the EZiCAT easy to use, requiring minimal user training.
- Starts in Power Mode
  Ensures the most potentially dangerous current carrying services are detected first for maximum operator safety.
- Hazard Zone
  Sensed Utilities close to the surface pose a significant safety risk to site workers. The new Hazard Zone function provides an additional warning to the close proximity of buried services, alerting users to the immediate danger.
- Pop-up Assist
  Maintains the highest peak reading obtained on the signal strength indicator for a period of time, allowing the operator to quickly and accurately pinpoint the service position.
- Signal Strength Indicator
  All EZiCAT i-Series locators feature numeric signal strength readout, specifically designed for easy buried location and use with signal generator.
- In build Test Function
  Allowing operators to test the hardware and software functionality of the EZiCAT before use.
- Service Due Indicator
  Wrench icon displayed after 12 months.
- Highly Visible Digital LCD Display
  With built-in light sensor, automatically enabling the backlight in dark conditions.

£695.00
£550.00

Features
- High contrast LCD display
- Automatic sensitivity adjustment
- 5 operating modes - including Auto Mode
- Hazard Zone - shallow service warning
- In-built user activated self test
- Peak Assist Function
- Bluetooth wireless data transfer
- Service depth indication

Features
- High Contrast LCD Display
- Automatic Pinpointing
- Always Starts in ‘Power Mode’ for Safety
- Automatic Sensitivity Adjustment
- 5 Operating Modes - including ‘Auto Mode’
- Hazard Zone - Shallow Service Warning
- In-built User Activated Self Test Function
- Peak Assist Function
- Bluetooth Wireless Data Transfer
- Service Depth Indication

£49.95

Contact Information
sales@surveyequipment.com
T 01189 820 500

About
Cable Avoidance
iSeries LOGiCAT Software – LOGiCAT Software
Allows you to upload stored records from individual locators, simply upload all records or search by date. Upload information includes:
- Time & Date Information
- Usage Duration
- User Identification
- Detection Mode Used
- Service Detection
- Product Fleet Management
- Diagnostic Check
- Management Reports

£695.00 £550.00

£49.95

£49.95
**ABT5100 TMD**

Abtus have over 100 years’ experience in the design and manufacture of railway measurement equipment. Specialising in lightweight, robust products to measure and maintain the rail-track and associated infrastructure.

Understanding the growing demand for absolute track measurement from the global survey market, Abtus have teamed up with AiC and Opti-cal Survey Equipment to deliver the ABT5100 Track Measuring Device.

**System Benefits:**
- Cable free solution
- Light weight
- Modular system
- One operating system for all survey data (Including set-up, track data and topo survey)
- Can be used on Tramway
- System is compatible with customers’ existing survey equipment
- Complete solution developed and supported in UK

<table>
<thead>
<tr>
<th>System configuration</th>
<th>System configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gauge (mm)</td>
<td>Leica total stations</td>
</tr>
<tr>
<td>1000, 1067, 1435, 1520/24, 1600, 1668/76</td>
<td>- motorised, ATR</td>
</tr>
<tr>
<td><strong>Measurement Range</strong></td>
<td>TS30, TP9200, TS15</td>
</tr>
<tr>
<td>Gauge</td>
<td>TP82000, GPS1200</td>
</tr>
<tr>
<td>- for nominal gauges</td>
<td>Power supply</td>
</tr>
<tr>
<td>Horizontal: 5 mm + 0.5 ppm (rms)</td>
<td>Leica GEB171, battery, rechargeable</td>
</tr>
<tr>
<td>Vertical: 10 mm + 0.5 ppm (rms)</td>
<td>&gt; 8 h</td>
</tr>
<tr>
<td>+/- 240 mm</td>
<td>Algo Hot Swappable</td>
</tr>
<tr>
<td>(+/- 10')</td>
<td>Li-Ion battery, rechargeable</td>
</tr>
<tr>
<td><strong>Cont. system accuracy</strong></td>
<td>Battery life*</td>
</tr>
<tr>
<td>Gauge</td>
<td>&gt; 8 h</td>
</tr>
<tr>
<td>Superelevation</td>
<td>Algoiz control computer</td>
</tr>
<tr>
<td>- stop/go mode</td>
<td>Battery life*</td>
</tr>
<tr>
<td>+/- 0.8 mm</td>
<td>&gt; 8 h</td>
</tr>
<tr>
<td>- kinematic mode</td>
<td>Environmental specifications</td>
</tr>
<tr>
<td>+/- 0.5 mm</td>
<td>Working temperature range</td>
</tr>
<tr>
<td>+/- 0.5 mm</td>
<td>-10° to +50° C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>System weight</th>
<th><strong>Environmental specifications</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>ABT5100</td>
<td>Humidity</td>
</tr>
<tr>
<td>- ready to measure</td>
<td></td>
</tr>
<tr>
<td>- incl. battery and computer</td>
<td>&lt; 80 %</td>
</tr>
<tr>
<td>20 kg</td>
<td><strong>Calibration and relative mode display</strong></td>
</tr>
</tbody>
</table>

Please call us on 01189 820 500 for more information regarding Track Monitoring Devices
RouteScan has been developed to provide quick, accurate structure clearance measurements relative to the Permanent Way. The Gauge self-locates on the track and can be operated from a position of safety using the supplied PDA via a Bluetooth connection. X/Y co-ordinate points are measured using a laser which rotates through 360º. RouteScan is also able to measure Track Gauge and Super-Elevation. Data recorded by RouteScan is compatible with MS Excel™ and Clear Route™ and is easily transferred to a PC via USB.

The unit is a lightweight 9.5kg and is provided with a rugged box for storage and transportation to and from site. The unit has been designed to be user-friendly, and if required additional training course can be provided.

Some of the functions of RouteScan are:
- Over Bridges
- Tunnels
- Platforms; including ‘true’ platform edge position
- Signals & Gantry
- Under Bridges
- Datum Plates
- Six Foot & ten Foot Rail positions
- Super-Elevation and Running Gauge

A target pole set is available for the capture of measurement positions that would otherwise have been obstructed.

Technical Data

<table>
<thead>
<tr>
<th>Point Co-ordinates</th>
<th>Range</th>
<th>Accuracy</th>
<th>Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.3-3.0m</td>
<td>±5mm @ 4.0m</td>
<td>±1.0mm @ 8.0m</td>
</tr>
<tr>
<td>Track Gauge</td>
<td>15/425 (or nominal)</td>
<td>±0.5mm</td>
<td>0.1mm</td>
</tr>
<tr>
<td>Super-Elevation</td>
<td>±200mm</td>
<td>±1.2mm</td>
<td>0.1mm</td>
</tr>
<tr>
<td>Dimensions</td>
<td>Length Width Height Weight</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1600mm 2630mm 960mm 9.5kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key Features:
- A range of viewing and editing tools which support .Sc0/.Xml data from an array of measurement devices
- Clear and concise editing tools
- Provision to view and edit multiple profiles
- Navigator window shows all selected profiles with cant and curvature
- Allows inclusion of track geometry measurements such as cant and radius
- Profiles from a whole structure survey can be viewed and edited together
- Photographic images of structures can be associated with structure profiles
- Multiple distance base settings

Key Benefits:
- Improved quality of survey data
- Saves time analysing measurement data
- Allows a comprehensive on site assessment
- Supports .sc0/.scn data from an array of measurement devices
- Training and support available
- Low ‘one off’ purchase price

Structure Survey Editor™ provides a low cost solution with no annual maintenance charges plus the back up support associated with a leading transport software provider.

The ultimate structure editing tool

The software editor has been designed to assist surveyors when undertaking measurements for tunnels, bridges and platforms by providing them with a tool that lets them view, and if necessary manipulate, profile data before undertaking any design or gauging clearance work. Data can be viewed at site and integrated with other measurements, such as cant and curvature. Measurement points can be edited to correct spurious points caused for example by lighting, foliage and areas of poor reflectivity.

Structure Survey Editor™ is the latest package to come from Balfour Beatty Rail Technologies. Over recent years there has been an increased requirement within the geo-spatial surveying sector to carry out infrastructure measurement analysis across rail networks so it is essential that surveyors are equipped with an editing tool that allows them to check, edit and view their profile data before undertaking and design or gauging clearance work.

Structure Survey Editor™ provides the capability to view and edit your infrastructure measurement data. Structure Survey Editor™ is the latest package to come from Balfour Beatty Rail Technologies. Over recent years there has been an increased requirement within the geo-spatial surveying sector to carry out infrastructure measurement analysis across rail networks so it is essential that surveyors are equipped with an editing tool that allows them to check, edit and view their profile data before undertaking and design or gauging clearance work.

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Rail Accessories

Monitoring Prism
Versatile monitoring prism which can be attached to the track side furniture and structures without the need to drill or stick. Easily removable at the end of the monitoring scheme and can be used again and again.

£55.00

Rail Angle Shoe
- Rail shoe for exact surveying of the rail position.
- Allows the operator to set a reference point on the inner side of the rail 14mm below the top.
- Metal construction with hardened 14mm long cylinder pin for exact setup.
- Available with Leica or 5/8" fitting
- Adjustable reach with rubber stop

£137.00

Platform Gauges
The Bance Platform Gauges have been designed to help set the platform coping stones to the track. It achieves this by measuring both height and distance from the outside rail running edge, on a level between both rails. It can be used to both set the platform stones, or check and measure their actual dimensions. The platform gauge is both rigid and stable whilst as light and manageable as possible. By preventing any flexibility in the gauge true accurate readings are guaranteed. It has handles and is balanced to enable one person to manœuvre and operate it, with clear simple and precise scale readings. The gauge can be used with no fear of making electrical signalling contact between the two rails, so it will not affect any signalling equipment.

- Separates into 2 sections for ease of transportation
- Calibration ISO 9002 NAMAS

<table>
<thead>
<tr>
<th>Description</th>
<th>Model</th>
<th>Lateral</th>
<th>Vertical</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard</td>
<td>PLG/STD</td>
<td>550 - 1200 mm</td>
<td>50 - 1230 mm</td>
<td>£1,585.00</td>
</tr>
<tr>
<td>Non-Conductive</td>
<td>PLG/NC</td>
<td>550 - 1050 mm</td>
<td>175 - 1200 mm</td>
<td>£1,785.00</td>
</tr>
</tbody>
</table>

sales@surveyequipment.com  T 01189 820 500
Laser scanning is a fast, accurate, and cost-efficient method of gathering three-dimensional data for use in 3D models and mapping. It is widely used throughout the surveying and engineering sectors and many others where large volumes of precision data need to be captured quickly and accurately.

Applications for 3D laser scanning include:

- Structural and Engineering applications
- Topographic surveys
- Volumetric Analysis – Stockpiles etc
- Road traffic accident scene
- Restricted Access Surveys
- Erosion monitoring
- Cityscape modelling – integration of terrestrial based scanning with airborne data
- Building and Architectural Survey
- Crime scene recording
- Slope and Embankment Modelling
- Manufacturing and processing facilities management
- Ports, harbour and water course modelling
- 3D modelling for film and television productions
- Visual Impact Assessment

**Leica ScanStation C5/C10**

Today’s most popular class of laser scanner, ScanStation, is now in a compact, all-in-one C10 platform. It includes scanner, tilt sensor, battery, controller, data storage, auto-adjusting video camera and laser plummet.

**ScanStation C5/C10 Benefits**

- **Range** up to 300 m range.
- **Field-of-View** Full 360° x 270° field-of-view
- **Speed** Scan at up to 50,000 points per second.
- **Flexibility & Integration** Compatible with existing Leica GNSS sensors.
- **Camera** Integrated high resolution camera for texture mapping point clouds.
- **Onboard display** Full Colour QVGA Touchscreen

The entry level ScanStation C5 can be upgraded over time to meet users developing requirements.

**HDS7000**

The HDS7000 phase-based scanner provides important “next level” performance features for demanding professionals, making it the industry’s best phase-based scanner.

**HDS7000 Benefits**

- **Speed** Up to 1 Million Points per Second
- **Range** Up to 180m
- **Higher Productivity** Ultra high-speed scanning and a 360x230 field-of-view combine with longer useful range for fewer setups and less scanning time
- **More Robustness** Operate with confidence from -10°C to +45°C, in harsh environments with a reliable “encapsulated mirror” design and a safe class 1 laser
- **Better Data Quality** Best combination of high accuracy and low scan noise at longer ranges for any phase-based scanner
- **Better Usability** A user friendly touch screen and compact design with integrated battery and data storage make it easy to use

**Ideal accessories to complement the Leica DISTO™ range**

<table>
<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leica TRI100 Tripod</td>
<td>Quality tripod with bubble level, very easy fine adjustment. Extendable length from 0.70 m to 1.74 m.</td>
<td>£59.00</td>
</tr>
<tr>
<td>Leica GLB10 Laser Red Glasses</td>
<td>Red lens glasses for improved visibility of the laser dot in bright rooms and outdoors up to 10-15m.</td>
<td>£12.95</td>
</tr>
<tr>
<td>Leica LSA360 Adapter</td>
<td>For precise indirect measurements with the tilt sensor from the tripod; tilt axis and laser beam are in one plane (elimination of tilt axis error). Suitable for a set-up pole with a diameter of 11–35 mm (0.45&quot;–1.35&quot;) and the Leica TRI 100 tripod.</td>
<td>£59.00</td>
</tr>
<tr>
<td>Leica TA360 Adapter</td>
<td>Handy metal tripod head for easy and precise targeting. Rotary axis, tilt axis and laser axis meet at one point. This leads to minimum deviations when using indirect measurement. Particularly suitable for the Leica TRI 100 tripod.</td>
<td>£59.00</td>
</tr>
<tr>
<td>Leica GZM30 Target Plate</td>
<td>Stick-on target plates for placing on ground markers.</td>
<td>£44.98</td>
</tr>
<tr>
<td>Leica GZM27 Target Plate</td>
<td>Stick-on target plates for fixing on to edges and corners.</td>
<td>£22.99</td>
</tr>
<tr>
<td>Leica GZM26 Target Plate</td>
<td>For measurements on to poorly reflective surfaces. Two-sided – grey side for shorter distances and brown for longer.</td>
<td>£19.99</td>
</tr>
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<td>Leica TR100 Tripod</td>
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</tr>
<tr>
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<td>£59.00</td>
</tr>
<tr>
<td>Leica TA360 Adapter</td>
<td>Handy metal tripod head for easy and precise targeting. Rotary axis, tilt axis and laser axis meet at one point. This leads to minimum deviations when using indirect measurement. Particularly suitable for the Leica TRI 100 tripod.</td>
<td>£59.00</td>
</tr>
<tr>
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<td>£19.99</td>
</tr>
</tbody>
</table>

Please call for further information and pricing

sales@surveyequipment.com

01189 820 500
It is essential to achieve the best performance from your level that you partner it with the suitable stave for the job. From standard dumpy levels to high accuracy digital levels we can supply the correct staff, if you are unsure of which stave to purchase please contact us and we will advise the best solution for you.

### Leica Staves

#### For Automatic Levels
- **ST-5** Dumpy Telescopic Staff, 5m, 5 Sections
- **ST-4D** Dumpy Telescopic Staff, 4m, with bubble
- **ST-5D** Dumpy Telescopic Staff, 5m, with bubble
- **ST-101**, Telescopic Staff 4m, 4 Sections
- **ST-103**, Telescopic Staff 4m, 5 Sections

#### For DNA Digital Levels
- **ST-103** Invar Code Staff, 2m
- **ST-104** Invar Code Staff, 2m
- **ST-105** Invar Code Staff, 2m

#### Industrial Invar
- **ST-92** Industrial Staff, 92cm
- **ST-182** Industrial Staff, 182cm
- **ST-60** Industrial Code Scale, 60cm

#### Lumi Scale
- **ST-122** LumiScale with Leica DNA bar code
- **ST-125** LumiScale with Leica sprinter bar code

---

### Leica Tripods

#### GST103
- **GST103** Tripod
- **GST05L** Tripod
- **GST101** Tripod

#### GST20-9
- **GST20-9** Tripod

#### GST120-9
- **GST120-9** Tripod

#### GST4
- **GST4** Tripod

---

### Staves – E Type
- **345133** Construction Telescopic Staff 5m, 5 Sections
- **663130** BTL4D Telescopic staff 4m, with bubble
- **663131** BTL5D Telescopic staff 5m, with bubble
- **727587** CLR101, Telescopic Staff 4m, 4 Sections
- **727588** CLR102, Telescopic Staff 5m, 4 Sections
- **757761** GT-4M Telescopic staff, 4m, fibreglass

### Staves – Barcode
- **741884** Dual Face Telescopic Staff, 4m 4 Section Metric

### Staves – Invar
- **563659** GPCL2 invar code lev.staff, 2m
- **555638** G6L3 Pair of struts t, GPCL3/GPLE3N
- **555636** GPLE2N Invar staff, 2m

---

### Staves – Lumi Scale
- **340222** Lumiscale with Leica DNA bar code
- **340225** Lumiscale with Leica sprinter bar code

---

**Item No.** | **Model** | **Material** | **Leg Clamp** | **Top** | **Max Height** | **Price**
--- | --- | --- | --- | --- | --- | ---
726833 | GST103 | Aluminium | Screw | Flat | 1.73m | £39.95
767710 | CTP104 | Aluminium | Quick release | Flat | 1.73m | £59.95
563630 | GST05L | Aluminium | Screw | Flat | 1.76m | £79.95
726831 | GST101 | Wood | Screw | Flat | 1.73m | £89.95
398244 | GST05 | Wood | Screw | Flat | 1.76m | £149.95
3914752 | GST20-9 | Wood | Screw | Flat | 1.8m | £219.95
667301 | GST120-9 | Wood | Screw | Flat | 1.8m | £219.95
332200 | GST4 Tripod Floor Bar | | | | | £229.95

---

**LumiScale** is a self-illuminating levelling staff for digital levels for use under unfavourable light conditions such as underground and tunnelling construction projects.
We have put together a number of detail kits below to go with your Leica Total Station, please remember these can be customised to suit your needs.

### Suggested Detail Equipment for Two-Person Operation

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Qty</th>
<th>Material Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>394752</td>
<td>1</td>
<td>GST30-9 Wooden heavy duty tripod</td>
</tr>
<tr>
<td>385500</td>
<td>1</td>
<td>GLS11 Aluminium reflector pole</td>
</tr>
<tr>
<td>641817</td>
<td>1</td>
<td>GPR121 Circular prism with holder</td>
</tr>
<tr>
<td>667718</td>
<td>1</td>
<td>GHM007 Instruments height meter</td>
</tr>
<tr>
<td>722045</td>
<td>1</td>
<td>GHT196 Distance holder for height meter</td>
</tr>
<tr>
<td>746919</td>
<td></td>
<td>Standard Detail Kit &quot;Round Prism&quot; £595.00</td>
</tr>
</tbody>
</table>

### Suggested Detail Equipment for Standard One-Person Operation

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Qty</th>
<th>Material Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>394752</td>
<td>1</td>
<td>GST30-9 Wooden heavy duty tripod</td>
</tr>
<tr>
<td>385500</td>
<td>1</td>
<td>GLS11 Aluminium reflector pole</td>
</tr>
<tr>
<td>639985</td>
<td>1</td>
<td>GRZ4 360° Prism</td>
</tr>
<tr>
<td>667718</td>
<td>1</td>
<td>GHM007 Instruments height meter</td>
</tr>
<tr>
<td>722045</td>
<td>1</td>
<td>GHT196 Distance holder for height meter</td>
</tr>
<tr>
<td>746920</td>
<td></td>
<td>Professional Detail Kit &quot;360 Prism&quot; £995.00</td>
</tr>
</tbody>
</table>

### Suggested Detail Equipment for SmartPole One-Person Operation

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Qty</th>
<th>Material Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>394752</td>
<td>1</td>
<td>GST30-9 Wooden heavy duty tripod</td>
</tr>
<tr>
<td>754391</td>
<td>1</td>
<td>GLS12 Aluminium SmartPole, telescopic snap-lock, cm</td>
</tr>
<tr>
<td>754394</td>
<td>1</td>
<td>GRZ122 360° Prism for SmartPole</td>
</tr>
<tr>
<td>667718</td>
<td>1</td>
<td>GHM007 Instruments height meter</td>
</tr>
<tr>
<td>722045</td>
<td>1</td>
<td>GHT196 Distance holder for height meter</td>
</tr>
<tr>
<td>6005356</td>
<td></td>
<td>SmartPole Ready Detail Kit &quot;360 Prism&quot; £1,395.00</td>
</tr>
</tbody>
</table>

---

We have put together a number of traverse kits below to go with your Leica Total Station, please remember these can be customised to suit your needs.

### Basic Set with Optical Plummets

**Part Number** | **Quantity** | **Material Description**                             |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>726533</td>
<td>2</td>
<td>GST103 Aluminium tripod</td>
</tr>
<tr>
<td>748888</td>
<td>2</td>
<td>GDF111/1 Tribrach without plummet</td>
</tr>
<tr>
<td>725568</td>
<td>2</td>
<td>GZ100 Carrier with optical plummet</td>
</tr>
<tr>
<td>667718</td>
<td>2</td>
<td>GPR111 Circular prism</td>
</tr>
<tr>
<td>867451</td>
<td>1</td>
<td>Container for GPR111/121 plummet tribrach</td>
</tr>
<tr>
<td><strong>743460</strong></td>
<td></td>
<td><strong>Basic Set with Optical Plummets £995.00</strong></td>
</tr>
</tbody>
</table>

### Professional Set with Optical Plummets

**Part Number** | **Quantity** | **Material Description**                             |
<table>
<thead>
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</thead>
<tbody>
<tr>
<td>394752</td>
<td>2</td>
<td>GST30-9 Wooden heavy duty tripod</td>
</tr>
<tr>
<td>667307</td>
<td>2</td>
<td>GDF120 Tribrach with optical plummet</td>
</tr>
<tr>
<td>667313</td>
<td>2</td>
<td>GFR144 Carrier with stub</td>
</tr>
<tr>
<td>641817</td>
<td>2</td>
<td>GPR121 Circular prism with holder</td>
</tr>
<tr>
<td>867451</td>
<td>1</td>
<td>Container for Traverse Kit</td>
</tr>
<tr>
<td><strong>743456</strong></td>
<td></td>
<td><strong>Professional Set with Optical Plummets £1,395.00</strong></td>
</tr>
</tbody>
</table>

### Professional Precise Set with Optical Plummets

**Part Number** | **Quantity** | **Material Description**                             |
<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>394752</td>
<td>2</td>
<td>GST30-9 Wooden heavy duty tripod</td>
</tr>
<tr>
<td>667304</td>
<td>2</td>
<td>GDF121 Tribrach without plummet</td>
</tr>
<tr>
<td>428340</td>
<td>2</td>
<td>GZ13 Precise carrier with optical plummet</td>
</tr>
<tr>
<td>641817</td>
<td>2</td>
<td>GPR121 Circular prism with holder</td>
</tr>
<tr>
<td>867451</td>
<td>1</td>
<td>Container for Traverse Kit</td>
</tr>
<tr>
<td><strong>743457</strong></td>
<td></td>
<td><strong>Professional Precise Set with Optical Plummets £2,495.00</strong></td>
</tr>
</tbody>
</table>

### Professional Set with Laser Plummets

**Part Number** | **Quantity** | **Material Description**                             |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>394752</td>
<td>2</td>
<td>GST30-9 Wooden heavy duty tripod</td>
</tr>
<tr>
<td>667304</td>
<td>2</td>
<td>GDF121 Tribrach without plummet</td>
</tr>
<tr>
<td>667316</td>
<td>2</td>
<td>SNL121 Precise carrier with laser plummet</td>
</tr>
<tr>
<td>641817</td>
<td>2</td>
<td>GPR121 Circular prism with holder</td>
</tr>
<tr>
<td>867451</td>
<td>1</td>
<td>Container for Traverse Kit</td>
</tr>
<tr>
<td><strong>743454</strong></td>
<td></td>
<td><strong>Professional Set with Laser Plummets £2,895.00</strong></td>
</tr>
</tbody>
</table>
### Leica Tribrachs

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Model</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>748888</td>
<td>GDF111-1</td>
<td>Tribrach without optical plummet</td>
<td>£109.95</td>
</tr>
<tr>
<td>667304</td>
<td>GDF121</td>
<td>Tribrach without optical plummet</td>
<td>£154.95</td>
</tr>
<tr>
<td>667307</td>
<td>GDF122</td>
<td>Tribrach with optical plummet</td>
<td>£235.95</td>
</tr>
<tr>
<td>667308</td>
<td>GDF112</td>
<td>Tribrach with optical plummet</td>
<td>£189.95</td>
</tr>
<tr>
<td>722045</td>
<td>GHT196</td>
<td>Holder for GHM007</td>
<td>£7.95</td>
</tr>
<tr>
<td>667718</td>
<td>GHM007</td>
<td>Instrument Height Measuring Meter</td>
<td>£24.95</td>
</tr>
</tbody>
</table>

### Leica Carriers

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Model</th>
<th>Plummet</th>
<th>Accuracy</th>
<th>Bubble</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>770715</td>
<td>GRT247</td>
<td>None</td>
<td>1.0mm</td>
<td>No</td>
<td>£71.95</td>
</tr>
<tr>
<td>725566</td>
<td>GZR103</td>
<td>Optical</td>
<td>1.0mm</td>
<td>Yes</td>
<td>£174.95</td>
</tr>
<tr>
<td>667313</td>
<td>GRT144</td>
<td>None</td>
<td>1.0mm</td>
<td>No</td>
<td>£64.95</td>
</tr>
<tr>
<td>667216</td>
<td>GRT146</td>
<td>None</td>
<td>1.0mm</td>
<td>No</td>
<td>£69.95</td>
</tr>
<tr>
<td>428340</td>
<td>GZR3</td>
<td>Optical</td>
<td>0.3mm</td>
<td>Yes</td>
<td>£649.95</td>
</tr>
<tr>
<td>360032</td>
<td>GR22</td>
<td>None</td>
<td>0.3mm</td>
<td>Yes</td>
<td>£399.95</td>
</tr>
<tr>
<td>667316</td>
<td>SNLL121</td>
<td>Laser</td>
<td>0.3mm</td>
<td>No</td>
<td>£724.95</td>
</tr>
<tr>
<td>667244</td>
<td>GZS4</td>
<td>Height hook</td>
<td></td>
<td></td>
<td>£106.95</td>
</tr>
<tr>
<td>667217</td>
<td>GAO31</td>
<td>Screw to Stub adapter</td>
<td></td>
<td></td>
<td>£79.95</td>
</tr>
</tbody>
</table>
**Leica Prisms**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Model</th>
<th>Prism Type</th>
<th>Accuracy</th>
<th>Range</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>753492</td>
<td>GPR113</td>
<td>Circular</td>
<td>2.0mm</td>
<td>2,500m</td>
<td>Circular Prism with Holder</td>
<td>£104.95</td>
</tr>
<tr>
<td>641618</td>
<td>GPR111</td>
<td>Circular</td>
<td>2.0mm</td>
<td>2,500m</td>
<td>Circular Prism with Holder</td>
<td>£104.95</td>
</tr>
<tr>
<td>641617</td>
<td>GPR121</td>
<td>Circular</td>
<td>1.0mm</td>
<td>3,500m</td>
<td>Precision Circular Prism with Holder</td>
<td>£199.95</td>
</tr>
<tr>
<td>752505</td>
<td>GPR112</td>
<td>Circular</td>
<td>2,500m</td>
<td></td>
<td>Monitoring/Mining prism</td>
<td>£64.95</td>
</tr>
<tr>
<td>362030</td>
<td>GPR1</td>
<td>Circular</td>
<td>1.0mm</td>
<td>3,500m</td>
<td>Precision circular prism</td>
<td>£99.95</td>
</tr>
<tr>
<td>555531</td>
<td>GPH1P</td>
<td>Circular</td>
<td>0.3mm</td>
<td>3,500m</td>
<td>Precise Reflector for High Accuracy</td>
<td>£595.00</td>
</tr>
<tr>
<td>639395</td>
<td>GRZ4</td>
<td>360°</td>
<td>2mm</td>
<td>600m</td>
<td>Suitable for all robotic TPS</td>
<td>£599.95</td>
</tr>
<tr>
<td>754394</td>
<td>GRZ122</td>
<td>360°</td>
<td>2.0mm</td>
<td>600m</td>
<td>Can be connected to the Leica SmartAntenna.</td>
<td>£899.95</td>
</tr>
<tr>
<td>644327</td>
<td>GRZ101</td>
<td>360°</td>
<td>1.5mm</td>
<td>350m</td>
<td>Ideal for short range, high accuracy tasks</td>
<td>£399.95</td>
</tr>
<tr>
<td>641662</td>
<td>GMP101</td>
<td>Mini Prism</td>
<td>1.0mm</td>
<td>2000m</td>
<td>Includes bubble, target plate, spike and bag</td>
<td>£136.95</td>
</tr>
<tr>
<td>642653</td>
<td>GMP111</td>
<td>Mini Prism</td>
<td>2.0mm</td>
<td>Long range</td>
<td>o constant prism, Includes bubble, and GLS115 mini reflector pole</td>
<td>£124.95</td>
</tr>
<tr>
<td>641762</td>
<td>GMP104</td>
<td>Mini Prism</td>
<td>N/A</td>
<td>2000m</td>
<td>Monitoring Prism with L-Bar for tent installation</td>
<td>£124.95</td>
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</tbody>
</table>

**Leica Detail Poles**

<table>
<thead>
<tr>
<th>Model</th>
<th>Max. Height</th>
<th>Material</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>GLS11</td>
<td>2.15m</td>
<td>Aluminum</td>
<td>£109.95</td>
</tr>
<tr>
<td>GLS12</td>
<td>2.00m</td>
<td>Aluminum</td>
<td>£124.95</td>
</tr>
<tr>
<td>GLS111/112</td>
<td>2.60m</td>
<td>Aluminum</td>
<td>£159.95</td>
</tr>
<tr>
<td>GZW12</td>
<td>3.60m</td>
<td>Aluminum</td>
<td>£154.95</td>
</tr>
<tr>
<td>GLS30/31</td>
<td>2.0mm</td>
<td>Carbon Fibre</td>
<td>£284.95</td>
</tr>
<tr>
<td>GLS14</td>
<td>0.3m</td>
<td>Aluminum</td>
<td>£49.95</td>
</tr>
<tr>
<td>GSR111</td>
<td>Dual nut support for all GLS</td>
<td>£149.95</td>
<td></td>
</tr>
</tbody>
</table>
Leica Batteries

The batteries available from Leica Geosystems are of the highest quality in respect of temperature tolerance, recharging capability, operating time and cycle behaviour.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>667318</th>
<th>667123</th>
<th>733269</th>
<th>772806</th>
<th>733270</th>
<th>754834</th>
<th>727367</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>GEB111</td>
<td>GEB121</td>
<td>GEB211</td>
<td>GEB212</td>
<td>GEB221</td>
<td>GEB241</td>
<td>GEB171</td>
</tr>
<tr>
<td>Chemistry</td>
<td>NiMH</td>
<td>NiMH</td>
<td>Li-Ion</td>
<td>Li-Ion</td>
<td>Li-Ion</td>
<td>Li-Ion</td>
<td>NiMH</td>
</tr>
<tr>
<td>Output</td>
<td>6V / 2.1Ah</td>
<td>6V / 4.2Ah</td>
<td>7.4V / 2.6Ah</td>
<td>7.4V / 2.6Ah</td>
<td>7.4V / 4.4Ah</td>
<td>14.8V / 4.8Ah</td>
<td>12V/8Ah</td>
</tr>
<tr>
<td>Instrument</td>
<td>TR1400/800 &amp; DNA</td>
<td>TR1400/700/800</td>
<td>Field controller</td>
<td>Viva Controller</td>
<td>GPS receiver</td>
<td>Viva, System 1200, Resina, Piper</td>
<td>TM30 / TS30</td>
</tr>
<tr>
<td>Price</td>
<td>£34.95</td>
<td>£69.95</td>
<td>£89.95</td>
<td>£105.95</td>
<td>£109.95</td>
<td>£164.95</td>
<td>£279.95</td>
</tr>
</tbody>
</table>

Leica Geosystems chargers ensure the fastest recharging time and the longest life span of Leica batteries.

Leica Chargers

<table>
<thead>
<tr>
<th>Item Number</th>
<th>733271</th>
<th>733233</th>
<th>733222</th>
<th>734753</th>
<th>734752</th>
<th>636983</th>
<th>773755</th>
<th>749279</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>GKL211</td>
<td>GD221</td>
<td>GD222</td>
<td>GKL112</td>
<td>GKL211</td>
<td>GKL22</td>
<td>GEV235</td>
<td>GDC221</td>
</tr>
<tr>
<td>Suitable for</td>
<td>GEB111, GEB121, GEB211, GEB212, GEB241, GEB171</td>
<td>Adaptor Plate for GKL211</td>
<td>Adaptor Plate for GKL211</td>
<td>GKL21, GEB211 and GEB212, car adapter included</td>
<td>GEB221, GEB211, GEB212, car adapter included</td>
<td>5 pin batteries (except GEB171)</td>
<td>GEV235 AC/DC Adapter for Viva series field controller</td>
<td>CEV208 Car adapter for the GKL221 charger</td>
</tr>
<tr>
<td>Price</td>
<td>£300.00</td>
<td>£39.95</td>
<td>£39.95</td>
<td>£47.25</td>
<td>£96.00</td>
<td>£80.00</td>
<td>£19.95</td>
<td>£106.50</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>£120.00</td>
</tr>
</tbody>
</table>

Leica Accessories

T 01189 820 500

sales@surveyequipment.com
Leica Data Storage

Losing data after a work-filled day is frustrating and expensive. The electronic accessories from Leica Geosystems comply with a higher standard than the commercially available accessories that meet consumer or even industry standards. The storage media and other data transfer products from Leica Geosystems are qualitatively of extremely high value and reliability.

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Model Number</th>
<th>Capacity</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>733256</td>
<td>MCF2/3</td>
<td>32 MB</td>
<td>32MB Compact Flash Card</td>
<td>£99.95</td>
</tr>
<tr>
<td>733257</td>
<td>MCF2/3</td>
<td>256 MB</td>
<td>256MB CompactFlash card</td>
<td>£99.95</td>
</tr>
<tr>
<td>745995</td>
<td>MCF1000</td>
<td>1 GB</td>
<td>1GB CompactFlash card</td>
<td>£269.95</td>
</tr>
<tr>
<td>765199</td>
<td>MS1</td>
<td>1 GB</td>
<td>1GB USB memory stick</td>
<td>£109.95</td>
</tr>
<tr>
<td>767856</td>
<td>MCF1000</td>
<td>1 GB</td>
<td>1GB SD memory card</td>
<td>£209.95</td>
</tr>
<tr>
<td>733258</td>
<td>MCFAD1</td>
<td>N/A</td>
<td>CompactFlash PC card adapter</td>
<td>£24.95</td>
</tr>
<tr>
<td>767895</td>
<td>MCR7</td>
<td>N/A</td>
<td>Card reader for SD/CF cards</td>
<td>£319.95</td>
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</tbody>
</table>

Leica TPS Accessories

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Model Number</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>378236</td>
<td>GOK6</td>
<td>Eyepiece for steep sights</td>
<td>£1,450.00</td>
</tr>
<tr>
<td>734514</td>
<td>GFZ3</td>
<td>Diagonal eyepiece for telescope, except T100</td>
<td>£424.95</td>
</tr>
<tr>
<td>744501</td>
<td>GAD26</td>
<td>Back strap [3], for container (case not included)</td>
<td>£24.95</td>
</tr>
<tr>
<td>727589</td>
<td>GVP102</td>
<td>Soft Bag for Prism Station (Prism Station not included)</td>
<td>£31.95</td>
</tr>
<tr>
<td>741965</td>
<td>GAD104</td>
<td>GAD104 SmartStation Adapter for GS09/GS12</td>
<td>£395.00</td>
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<tr>
<td>767859</td>
<td>GAD110</td>
<td>SmartStation Adapter for GS15</td>
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<tr>
<td>741964</td>
<td>RH1200</td>
<td>1200 RadioHandle with integrated radio modem</td>
<td>£895.00</td>
</tr>
<tr>
<td>772300</td>
<td>RH15</td>
<td>Viva RadioHandle with integrated radio modem</td>
<td>£895.00</td>
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<tr>
<td>788853</td>
<td>RH16</td>
<td>Viva Long Range Bluetooth® Handle</td>
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</table>
Leica Viva Field Controller Accessories

<table>
<thead>
<tr>
<th>Item Number</th>
<th>Model</th>
<th>Description</th>
<th>Price</th>
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</thead>
<tbody>
<tr>
<td>767804</td>
<td>GVP643</td>
<td>Soft Bag for CS10 Field Controller</td>
<td>£17.50</td>
</tr>
<tr>
<td>767805</td>
<td>GVP644</td>
<td>Soft Bag for CS15 Field Controller</td>
<td>£17.50</td>
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<tr>
<td>767877</td>
<td>GHT31</td>
<td>Hand Strap for Leica Viva Field Controller</td>
<td>£35.00</td>
</tr>
<tr>
<td>767806</td>
<td>GHT61</td>
<td>Docking Station for Leica Viva Field Controller</td>
<td>£189.95</td>
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<tr>
<td>767879</td>
<td>GHT62</td>
<td>Holder for Field Controller</td>
<td>£24.95</td>
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<tr>
<td>767880</td>
<td>GHT63</td>
<td>Pole clamp for Field Controller</td>
<td>£85.95</td>
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<tr>
<td>767807</td>
<td>SPF01</td>
<td>Anti-Glare Screen Protectors</td>
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<tr>
<td>781521</td>
<td>GDZ69</td>
<td>Stylus Pen</td>
<td>£4.44</td>
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</table>

Leica GNSS Accessories

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Model</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>770707</td>
<td>GVP647</td>
<td>Minipack for GNSS receiver</td>
<td>£102.22</td>
</tr>
<tr>
<td>667228</td>
<td>GAD32</td>
<td>Telescopic rod with 5/8” screw</td>
<td>£35.95</td>
</tr>
<tr>
<td>667219</td>
<td>GAD33</td>
<td>Arm 15cm,GPS/Gainflex antenna</td>
<td>£39.95</td>
</tr>
<tr>
<td>667220</td>
<td>GAD34</td>
<td>Arm 3cm telescopic rod/Gainflex antenna</td>
<td>£39.95</td>
</tr>
<tr>
<td>767790</td>
<td>GAD108</td>
<td>UHF/GSM antenna arm for GS15</td>
<td>£102.95</td>
</tr>
<tr>
<td>743282</td>
<td>GAT1202</td>
<td>Radio modem Antenna for radio modems 435-470MHz</td>
<td>£39.95</td>
</tr>
<tr>
<td>743283</td>
<td>GAT1203</td>
<td>Mobile Antenna for 900/1800MHz mobile network</td>
<td>£39.95</td>
</tr>
<tr>
<td>667243</td>
<td>GAT2</td>
<td>Gainflex radio antenna, frequency range 435 - 470 MHz</td>
<td>£39.95</td>
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<tr>
<td>782500</td>
<td>GAT18</td>
<td>Multiband GSM/UMTS antenna for 850/1900MHz for 900/1800MHz and 2100MHz mobile networks</td>
<td>£69.95</td>
</tr>
</tbody>
</table>

Leica Accessories
<table>
<thead>
<tr>
<th>Device</th>
<th>Instrument</th>
<th>Art.</th>
<th>Sign</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>GEV171</td>
<td>TS30/GRX1200/1800/3009</td>
<td>740678</td>
<td>GEV202</td>
<td>Power cable, 1.8 m, connects TS30 to external battery</td>
</tr>
<tr>
<td>GEV200</td>
<td>TS30/GRX1200/1800</td>
<td>750130</td>
<td>GEV201</td>
<td>Power cable, 1.8 m, connects GEV200 to external battery</td>
</tr>
<tr>
<td>GEV172</td>
<td>TS30/GS15</td>
<td>730328</td>
<td>GEV172</td>
<td>Y-cable, 2.8 m, connects GRX1200 or GRX1200/TS30 to external battery</td>
</tr>
<tr>
<td>GEV185</td>
<td>TS30/GS15</td>
<td>759835</td>
<td>GEV185</td>
<td>Y-cable, 1.8 m, connects GEV185 to GRX1200/TS30</td>
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<tr>
<td>GEV191</td>
<td>TS30/GS15</td>
<td>745919</td>
<td>GEV191</td>
<td>Power cable, 1.8 m, connects TS30 to GRX1200/TS30</td>
</tr>
<tr>
<td>12 V car battery</td>
<td>All instruments</td>
<td>&amp; E86</td>
<td>&amp; E86</td>
<td>Power cable, 4 m, connects all battery cables to 12 V car battery</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Device</th>
<th>Instrument</th>
<th>Art.</th>
<th>Sign</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PC-RS232 Port</td>
<td>TS30/GEV170/1800/3009 GS15/GEV170/1800/3009</td>
<td>565625</td>
<td>GEV202</td>
<td>Data cable, 2 m, connects GEV170 to RS232</td>
</tr>
<tr>
<td></td>
<td>TS30/GS15</td>
<td>734698</td>
<td>GEV185</td>
<td>Y-cable, 2 m, connects TS30 to GRX1200/TS30</td>
</tr>
<tr>
<td></td>
<td>TS20/GRX1200/1800</td>
<td>723280</td>
<td>GEV202</td>
<td>Data cable, 2 m, connects GRX1200/TS30 to PC (RS232)</td>
</tr>
<tr>
<td></td>
<td>TS30/GEV170/1800/3009 GS15/GEV170/1800/3009</td>
<td>723290</td>
<td>GEV185</td>
<td>Y-cable, 2 m, connects TS30 to GRX1200/TS30</td>
</tr>
<tr>
<td></td>
<td>GEV170-1800</td>
<td>723271</td>
<td>GEV202</td>
<td>Program adapter cable, 1.8 m, for satellite radios</td>
</tr>
<tr>
<td>PC-USB port</td>
<td>TS30/GEV170/1800/3009 GS15/GEV170/1800/3009</td>
<td>734700</td>
<td>GEV185</td>
<td>Serial Data transfer cable, 2 m, connects TS30 to USB</td>
</tr>
<tr>
<td></td>
<td>TS30/GEV170/1800/3009 GS15/GEV170/1800/3009</td>
<td>734705</td>
<td>GEV185</td>
<td>Serial Data transfer cable, 2 m, connects GRX1200/TS30 to USB</td>
</tr>
<tr>
<td></td>
<td>TS30/GEV170/1800/3009 GS15/GEV170/1800/3009</td>
<td>759466</td>
<td>GEV202</td>
<td>Data cable, 2 m, connects TS30 to USB</td>
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<tr>
<td></td>
<td>TS30/GEV170/1800/3009 GS15/GEV170/1800/3009</td>
<td>767858</td>
<td>GEV202</td>
<td>USB data cable, 1.8 m, connects TS30 to USB</td>
</tr>
<tr>
<td></td>
<td>TS30/GEV170/1800/3009 GS15/GEV170/1800/3009</td>
<td>764700</td>
<td>GEV202</td>
<td>USB data cable, 1.8 m, connects TS30 to USB</td>
</tr>
<tr>
<td>CS90/RX1210</td>
<td>GRX1200/GS10/1200</td>
<td>732363</td>
<td>GEV153</td>
<td>Data transfer cable, 1.8 m, connects RX1210 to GRX1200/GS10/1200</td>
</tr>
<tr>
<td>CS10/CS15</td>
<td>TRS1200</td>
<td>756367</td>
<td>GEV202</td>
<td>Data transfer cable, 1.8 m, connects CS10 to TRS1200</td>
</tr>
<tr>
<td></td>
<td>CS15/GS10</td>
<td>767858</td>
<td>GEV202</td>
<td>Data transfer cable, 1.8 m, connects TRS1200 to GS15/GS10</td>
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<tr>
<td>CS10*/CS15* CS9</td>
<td>GS15/GS10/GS09</td>
<td>772807</td>
<td>GEV202</td>
<td>USB data cable, 1.8 m, connects GS15/GS10/GS09 to GS15/Lemo</td>
</tr>
</tbody>
</table>

* with Lemo connector module
** with Mini USB connector module
### Marking

**Spray Paint**
- Permanent aerosol paint in a large 750ml can.
- The paint is a blend of resins solvents and colour pigment designed to cover with one application.
- Ideal for either hand spot marking or applicator use for line marking.
- Can be used both indoors and out.
- Durable in adverse weather conditions.
- Available in 750ml sizes and two colours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Price Per Can</th>
</tr>
</thead>
<tbody>
<tr>
<td>16401</td>
<td>Spray Paint – Red</td>
<td>£2.75</td>
</tr>
<tr>
<td>16402</td>
<td>Spray Paint – Blue</td>
<td>£2.75</td>
</tr>
<tr>
<td>16403</td>
<td>Spray Paint – Green</td>
<td>£2.75</td>
</tr>
<tr>
<td>16404</td>
<td>Spray Paint – Orange</td>
<td>£2.75</td>
</tr>
<tr>
<td>16405</td>
<td>Spray Paint – Yellow</td>
<td>£2.75</td>
</tr>
<tr>
<td>16406</td>
<td>Spray Paint – White</td>
<td>£2.75</td>
</tr>
<tr>
<td>16407</td>
<td>Spray Paint – Black</td>
<td>£2.75</td>
</tr>
</tbody>
</table>

**Temp-Mark**
- Water based biodegradable paint.
- Designed to last up to one month in normal weather conditions or can be washed off with water.
- Ideal where you are working in sensitive areas and do not want to leave unsightly marks on the ground.
- Available in 750ml sizes and two colours.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Price Per Can</th>
</tr>
</thead>
<tbody>
<tr>
<td>16425</td>
<td>750ml Temp Mark – Yellow</td>
<td>£5.25</td>
</tr>
<tr>
<td>16426</td>
<td>750ml Temp Mark – White</td>
<td>£5.25</td>
</tr>
</tbody>
</table>

**Spray-Mark**
- Durable in adverse weather conditions.
- Constant and even flow.
- Can be used in all directions.
- Safety catch lid
- Easier to mark those hard to reach places.
- Available in 500ml sizes and comes in a range of colours.
- Six bright fluorescent colours: Red – Blue – Green – Orange – Yellow – Pink
- Also available in two standard colours: Black – White.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Price Per Can</th>
</tr>
</thead>
<tbody>
<tr>
<td>16101</td>
<td>500ml – Red Fluorescent</td>
<td>£3.75</td>
</tr>
<tr>
<td>16102</td>
<td>500ml – Blue Fluorescent</td>
<td>£3.75</td>
</tr>
<tr>
<td>16103</td>
<td>500ml – Green Fluorescent</td>
<td>£3.75</td>
</tr>
<tr>
<td>16104</td>
<td>500ml – Orange Fluorescent</td>
<td>£3.75</td>
</tr>
<tr>
<td>16105</td>
<td>500ml – Yellow Fluorescent</td>
<td>£3.75</td>
</tr>
<tr>
<td>16106</td>
<td>500ml – Pink Fluorescent</td>
<td>£3.75</td>
</tr>
<tr>
<td>16107</td>
<td>500ml – White Standard</td>
<td>£3.75</td>
</tr>
<tr>
<td>16108</td>
<td>500ml – Black Standard</td>
<td>£3.75</td>
</tr>
</tbody>
</table>

**Paint Accessories**
- 4 Wheel Line Applicator
- Hand Paint Gun
- Spray Can Holder
- Spray Can Holder w/ Pockets
- 50x50mm Masking Tape
- Spray Point Stencil
- Numbers 0-9 PVC Stencils
- Letters A-Z PVC Stencils

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>19125</td>
<td>4 Wheel Line Applicator</td>
<td>£115.00</td>
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<tr>
<td>19010</td>
<td>Hand Paint Gun</td>
<td>£20.00</td>
</tr>
<tr>
<td>80802</td>
<td>Spray Can Holder</td>
<td>£18.00</td>
</tr>
<tr>
<td>80803</td>
<td>Spray Can Holder w/ Pockets</td>
<td>£18.00</td>
</tr>
<tr>
<td>66350</td>
<td>50x50mm Masking Tape</td>
<td>£2.70</td>
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<tr>
<td>60800</td>
<td>Spray Point Stencil</td>
<td>£10.50</td>
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<tr>
<td>608416</td>
<td>Numbers 0-9 PVC Stencils</td>
<td>£2.00</td>
</tr>
<tr>
<td>608417</td>
<td>Letters A-Z PVC Stencils</td>
<td>£50.00</td>
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</tbody>
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### Markers

**Paint Stick Markers**
- A solidified paint in stick form.
- Allows you to mark on virtually any surface even if it is wet or oily.
- Available in 7 colours.
- Boxed in 12.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per Box</th>
</tr>
</thead>
<tbody>
<tr>
<td>12041</td>
<td>Paint Stick – Red</td>
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<tr>
<td>12042</td>
<td>Paint Stick – Blue</td>
<td>£14.50</td>
</tr>
<tr>
<td>12043</td>
<td>Paint Stick – Green</td>
<td>£14.50</td>
</tr>
<tr>
<td>12044</td>
<td>Paint Stick – Orange</td>
<td>£14.50</td>
</tr>
<tr>
<td>12045</td>
<td>Paint Stick – Yellow</td>
<td>£14.50</td>
</tr>
<tr>
<td>12046</td>
<td>Paint Stick – White</td>
<td>£14.50</td>
</tr>
<tr>
<td>12048</td>
<td>Paint Stick – Black</td>
<td>£14.50</td>
</tr>
</tbody>
</table>

**Chalk**
- Soft Chalk Stick
- 22x114mm
- For general purpose site & highway marking.

**Engineers Chalk**
- Hard Engineers Chalk (French Chalk)
- 10x10x100mm
- Ideal for precision marking.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per Box</th>
</tr>
</thead>
<tbody>
<tr>
<td>12324</td>
<td>Chalk Sticks 14mm – Box 72</td>
<td>£30.00</td>
</tr>
<tr>
<td>12325</td>
<td>Engineers Chalk 100mm – Box 12</td>
<td>£2.70</td>
</tr>
<tr>
<td>12326</td>
<td>Engineers Chalk 100mm – Box 50</td>
<td>£16.00</td>
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</tbody>
</table>

**Universal Crayon**
- A general purpose crayon for marking a variety of surfaces.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per Box</th>
</tr>
</thead>
<tbody>
<tr>
<td>12375</td>
<td>Wax Crayon Yellow – Box 12</td>
<td>£6.45</td>
</tr>
<tr>
<td>12376</td>
<td>Wax Crayon White – Box 12</td>
<td>£7.00</td>
</tr>
</tbody>
</table>

### Ancillary Items

**Paint Marker**
- Edding Paint Markers with light-fast waterproof paint for industrial applications.
- Yellow, 2-4mm line
- Available in 3 alternate sizes of marking tips, broad, medium and fine
- Colours available: yellow and white.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>12785</td>
<td>Paint Marker Medium – Yellow</td>
<td>£3.50</td>
</tr>
<tr>
<td>12786</td>
<td>Paint Marker Medium – White</td>
<td>£3.50</td>
</tr>
</tbody>
</table>

**Carpenter’s Pencils**
- Blackedge top quality flat carpenter’s pencils.
- Available in three grades soft medium and hard.
- All suitable for carpenters

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>12600</td>
<td>Carpenters Pencil – Green – Hard</td>
<td>£1.30</td>
</tr>
<tr>
<td>12601</td>
<td>Carpenters Pencil – Red – Medium</td>
<td>£1.30</td>
</tr>
<tr>
<td>12602</td>
<td>Carpenters Pencil – Blue – Soft</td>
<td>£1.30</td>
</tr>
</tbody>
</table>
Marking – Survey Nails

Survey Point Nail
- Available in three sizes 50mm, 75mm and 100mm
- Large 20mm diameter head with central monitoring recess
- Should additional washers be required then there are 30mm diameter (209350) & 50mm diameter (209360) available.

P-K Survey Nail
- A superior quality heavy duty hardened steel survey nail.
- Gives maximum holding power with pinpoint accuracy.
- Made of especially durable steel that is zinc plated for corrosion resistance.
- Ribbed threads assure a permanent fastening into most materials.
- Once they are into masonry they won’t work loose.
- Available in five sizes to suit a variety of applications.
- Supplied in boxes of 100.

Hilti Type Nail
- For hard surface penetration.
- Complete with steel support washer.
- Can also be used on their own by hand driving them into a variety of hard surfaces.
- Supplied in packs of 100.

Helical Twist Nail
- Ideal in breeze block walls and superb holding power in asphalt surfaces.
- Can be used with a 25mm diameter support washer (code: 203350).

Survey Nail Selection Box
- Also makes a handy universal kit allowing you to have the right type of marking nail to suit a variety of surfaces.
- The 100 piece kit comprises the full range of nails available with supporting washers.
- All in a compartmented box with a hinged lid.

The kit contains the following: 25mm P-K Nail x5, 32mm P-K Nail x5, 38mm P-K Nail x5, 50mm P-K Nail x10, 64mm P-K Nail x10, 38mm Hilti Type Nail x5, 60 x 4mm Helical Nail x5, 50mm Survey Point x5, 75mm Survey Point x5, 100mm Survey Point x5, 25mm Washer for Helical Nail x5, 25mm Washer for P-K Nail x5, 30mm P-K Plated Washer x25, 50mm Steel Washer x5

Marking – Nail Washers

Survey Washer
- Marking Washers to highlight marking nails etc.
- The steel washers are zinc plated for resistance to corrosion.
- Supplied in packs of 100.

Surveyor’s Shiners
- Used for indicating semi-permanent points with spikes or survey nails.
- Simply drive the nail you are using through the pre-marked centre.

Disk-Mark
- Manufactured from a tough high impact weather resistant plastic material.
- At 54mm wide and with a low profile (3mm) it allows heavy vehicles and pedestrians to run over the top without damage.
- The Disk-Mark has a blank area allowing you to record data.
- Alternatively your company name can be pre-printed on the disk for positive identification.
- Uses: Survey work bench marks, setting-out, road openings, resurfacing work, road & car park marking, footpaths, identifying buildings, services re-instatement / repair areas, trees walls, setting out pegs and exhibitions.
- The Disk-Mark is fixed to tarmac surfaces with the 60mm helical twist hardened steel nail.
- The P-K indented survey nail can also be used.
- Alternatively Disk-Mark can be adhered to most surfaces with Araldite Rapid a fast setting epoxy resin adhesive.
- Disk-Marks are also available in boxes of 100 c/w nails support washers and marker.

Hiring & Servicing

Support & Training

How to

About

E sales@surveyequipment.com
T 01189 820 500

Ancillary Items
**Wooden Survey Pegs**
- A range of top quality economical softwood stakes and profile boards for general survey projects setting out and building control work on site.
- The stakes have rounded points and four sides to ensure they stay on line when they are driven into the ground.
- Wide 40 x 40mm heads make for the easy attachment of reference nails or markers.
- Three sizes are available: 300, 500 and 1200mm.
- The profile boards measure 70 x 13 x 900mm.
- All are packed in bundles of 25.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per 25</th>
</tr>
</thead>
<tbody>
<tr>
<td>202200</td>
<td>300mm Survey Pegs (25)</td>
<td>£11.50</td>
</tr>
<tr>
<td>202205</td>
<td>500mm Survey Pegs (25)</td>
<td>£15.00</td>
</tr>
<tr>
<td>202210</td>
<td>1200mm Survey Pegs (25)</td>
<td>£25.50</td>
</tr>
<tr>
<td>202215</td>
<td>500mm Profile Boards (25)</td>
<td>£14.00</td>
</tr>
</tbody>
</table>

**Plastic Survey Stakes**
- Red plastic peg.
- 305 x 16mm with built in tape and line hooks for setting out.
- Supplied in packs of 10.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>202201</td>
<td>305mm Red Plastic Survey Pegs</td>
<td>£6.50</td>
</tr>
</tbody>
</table>

**Steel Survey Stakes**
- Top quality steel stake for general survey projects setting out and building control work on site.
- Each peg is 15 x 15 x 350mm long.
- Supplied in bundles of 10.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>203110</td>
<td>350mm Steel Survey Pegs</td>
<td>£7.80</td>
</tr>
</tbody>
</table>

**Flag Marks**
- The flag size is 127 x 100mm.
- FlagMarks are available in six standard colours – Red, Blue, Green, Orange, Yellow and White – allowing colour coded marking systems to be set on site.
- Sold in packs of 100.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>14101</td>
<td>Flag-Mark - Red</td>
<td>£10.50</td>
</tr>
<tr>
<td>14102</td>
<td>Flag-Mark - Blue</td>
<td>£10.50</td>
</tr>
<tr>
<td>14103</td>
<td>Flag-Mark - Green</td>
<td>£10.50</td>
</tr>
<tr>
<td>14104</td>
<td>Flag-Mark - Orange</td>
<td>£10.50</td>
</tr>
<tr>
<td>14105</td>
<td>Flag-Mark - Yellow</td>
<td>£10.50</td>
</tr>
<tr>
<td>14106</td>
<td>Flag-Mark - White</td>
<td>£10.50</td>
</tr>
</tbody>
</table>

**Perma-Mark**
- Manufactured from high tensile 18mm ribbed steel for maximum ground grip and rigidity.
- Three sizes available 350mm, 800mm and 1 metre to suit all ground conditions.
- Perma-Marks are simple to install: place the head in position and drive the spike through the head. Mark the data-disk with your details and secure with the plumbing stud.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>10035C</td>
<td>350mm Perma-Mark Complete</td>
<td>£15.75</td>
</tr>
<tr>
<td>10080C</td>
<td>800mm Perma-Mark Complete</td>
<td>£16.30</td>
</tr>
<tr>
<td>10110C</td>
<td>1000mm Perma-Mark Complete</td>
<td>£17.00</td>
</tr>
</tbody>
</table>

**Ground-Mark**
- Manufactured from high quality steel sheathed in a tough polyethylene material.
- Designed for maximum grip in a variety of soil conditions.
- Has a cadmium plated bullet point tip for accurate precision allowing it to be driven into the hardest of soils.
- Available with Flat or Raised Heads.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>10300</td>
<td>300mm Ground Mark (Flat Head)</td>
<td>£6.30</td>
</tr>
<tr>
<td>10305</td>
<td>600mm Ground Mark (Flat Head)</td>
<td>£7.35</td>
</tr>
<tr>
<td>10310</td>
<td>300mm Ground Mark (Raised Head)</td>
<td>£6.80</td>
</tr>
<tr>
<td>10315</td>
<td>600mm Ground Mark (Raised Head)</td>
<td>£7.80</td>
</tr>
</tbody>
</table>

**Econo-Mark**
- Comprises of a heavy duty 800mm long high tensile ribbed steel bar with a forged point for easy penetration into hard ground.
- The top is capped off with a yellow Data-Disk with space to write on the station number or preferred site data. Disk diameter 54mm.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>10600</td>
<td>800mm Econo-Mark Complete</td>
<td>£7.35</td>
</tr>
</tbody>
</table>

**Land-Mark**
- This PGM must be the sturdiest on the market.
- Constructed from 3mm steel plate.
- No installation kit required – only a lump hammer.
- Head accepts Data-Disk and accessory adaptor.
- Downward pointing lugs on head for protection and grip.
- 5/8” adaptor available for 5/8” and Leica adaptors.
- Head Size: 80 x 80mm.
- Length: 500mm

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>10500</td>
<td>LandMark Complete</td>
<td>£13.50</td>
</tr>
</tbody>
</table>

*For sales inquiries, please contact: sales@surveyequipment.com T 01189 820 500*
Ancillary Items

## Marking - Wall & Floor Marks

### Wall Mark
- Adaptable monitor and reference point marker
- Comprises of a 12x40mm fixed base, permanently set into the wall or floor to which a variety of markers can be attached.
- The internally threaded lipped anchor (208999) provides an easy to install wall or floor fixing. The lipped feature on this anchor helps preventing the anchor slipping back into the cavity.
- Whilst markers are removable they do not disturb the fixed base so the position is always permanent.
- The removable reference points are available in six types:
  - 16mm dia x10mm stainless steel levelling stud
  - 18mm dia x 5mm stainless steel floor levelling stud
  - 16mm dia Ball x 23mm steel precision monitoring ball
  - 22mm dia Ball x 77mm stainless steel monitoring ball
  - 5/8" x 10mm stainless steel accessory adaptor
  - Leica style stainless steel adaptor
- The 5/8” adaptor allows prism to be attached
- Once the base has been fixed the reference points can be attached or removed without affecting base position
- Allows precise monitoring time without leaving expensive equipment installed
- Reference points can be removed and capped to protect threaded insert
- Data Disks can be added for reference point information
- When ordering for the first time you will require the following:
  - Drill Bit
  - Base Fixing
  - Base Fixing Tool
  - Removable Marker
  - Appropriate size Allen key.

### Anchor Marks
- A versatile and economical survey marker which allows for a variety of permanent survey stations to be set.
- Easy to install.
- Stable and very durable making them ideal for accurate X/Y/Z co-ordination.
- Stability – Resistance to horizontal and vertical movement: The Anchor-Marks’ tubular shaft is 25mm in diameter which gives a high degree of lateral stability.
- Complete with a unique reversible aluminium head allowing you to set the marker above ground increasing visibility or flush with the surface giving better stability and resistance to vandalism.
- A data disk Allen key marker pen and a stainless steel domed plumbing stud complete the outfit.
- An installation kit is required for your first purchase, but can be used for all future Anchor-Mark installations.

### Brass Markers

#### 209501
- Flat headed brass marker.
- Ideal for scribing.
- Head 19 x 22mm Shank 25 x 10mm.
- Pack of 10

#### 209511 & 209521
- Dome headed Brass survey marker.
  - Head 10mm Shank 20 or 30 x 6mm
  - Packs of 10

#### 209534 & 209536
- Large headed brass marker with chamfered edges.
  - Ideal as boundary or general survey reference markers.
  - Two tops flat or with central levelling dome.
  - Shank is ribbed for grouting or gluing in position.
  - Head 38mm Shank 50 x 8mm
Reflective Targets

Greater distances can be achieved by using multiples of 5 and 9 targets which are easily
attached with the self-adhesive backing.

- The 25mm square fluorescent Retro-Mark Yellow is highly visible in daylight.
- These targets work with most EDMs and are ideal for monitoring work where you have to leave
  targets in position over long periods.
- Adhesive Retro-Reflective Target Sheets

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>736532</td>
<td>22M0 - 20 x 20 mm, for measurements up to 100 m (330 ft)</td>
<td>£44.44</td>
</tr>
<tr>
<td>763533</td>
<td>22M10 - 40 x 40 mm, for measurements up to 200 m (650 ft)</td>
<td>£48.89</td>
</tr>
<tr>
<td>763534</td>
<td>22M31 - 80 x 80 mm, for measurements up to 250 m (800 ft)</td>
<td>£53.33</td>
</tr>
</tbody>
</table>

Sokkia Reflective Targets

Adhesive Retro-Reflective Target Sheets

These targets work with most EDMs and are ideal for monitoring work where you have to leave targets in position over long periods.

Easy-to-use reflective targets, supplied on convenient adhesive-backed sheets, can be directly fixed to measuring points.

<table>
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<td>22M31 - 80 x 80 mm, for measurements up to 250 m (800 ft)</td>
<td>£53.33</td>
</tr>
</tbody>
</table>

Retro-Mark

- An inexpensive range of retro-reflective targets in four colours.
- These targets work with most EDMs and are ideal for monitoring work where you have to leave targets in position over long periods.
- The 25mm square fluorescent Retro-Mark Yellow is highly visible in daylight.
- A single 25mm target will give a measuring range in excess of 100m with mm accuracy and an angle of intersection of up to 60 degrees.
- Greater distances can be achieved by using multiples of 5 and 9 targets which are easily attached with the self-adhesive backing.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td>30140</td>
<td>25mm - Yellow - Sheet 81</td>
<td>£22.55</td>
</tr>
<tr>
<td>30141</td>
<td>25mm - Yellow - Sheet 7</td>
<td>£3.15</td>
</tr>
<tr>
<td>30110</td>
<td>10mm - Amber - Sheet 400</td>
<td>£44.60</td>
</tr>
<tr>
<td>30104</td>
<td>20mm - Amber - Sheet 100</td>
<td>£33.30</td>
</tr>
<tr>
<td>30105</td>
<td>30mm - Amber - Sheet 49</td>
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<tr>
<td>30190</td>
<td>10mm - Silver - Sheet 400</td>
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<td>30020</td>
<td>20mm - Silver - Sheet 100</td>
<td>£33.30</td>
</tr>
<tr>
<td>30005</td>
<td>30mm - Silver - Sheet 49</td>
<td>£33.30</td>
</tr>
<tr>
<td>30010</td>
<td>10mm - Orange - Sheet 400</td>
<td>£44.60</td>
</tr>
<tr>
<td>30015</td>
<td>20mm - Orange - Sheet 100</td>
<td>£33.30</td>
</tr>
<tr>
<td>30020</td>
<td>30mm - Orange - Sheet 49</td>
<td>£33.30</td>
</tr>
</tbody>
</table>

PinPoint Smart Targets

Simple – safe – extremely accurate

Use PinPoint Smart Targets to permanently document site control. This has created a new standard in surveying. All survey points provide unambiguous, permanent and distinctive documentation on all types of site.

Great for back sight’s, check shots, elevation references and monitoring situations, ‘Smart from the Start’ PinPoint markers are the best way to take advantage of your investment in high tech survey equipment.

RS10 and RS11 Smart Datum

Ideal for concrete construction and for measurement of pre-cast sections. Available in White or Red

| RS10        | £4.50 per unit | RS11 £4.50 per unit |
| RS30 to RS41 Smart Targets

The combination target for engineers and groundworkers

Available in Grey or Red

| RS30        | £6.30 per unit | RS41 £6.30 per unit |
| RS50 to RS71 Smart Targets

The all-round targets for a variety of uses

Available in Grey or Red

| RS50        | £4.85 per unit | RS71 £4.85 per unit |
| RS80 and RS90

Smart Angle Targets - The solution for difficult positions

Available in Grey or Red

| RS80        | £10.50 per unit | RS90 £10.50 per unit |
| RSAK80 Plastic adapter with RS80 Smart Angle Targets

Available in Grey or Red

| RSAK80      | £15.00 per unit |
Protimeter – Moisture Meters

Protimeter Mini – Moisture Meter
- The definitive general purpose moisture meter for building surveying timber inspection and a very broad range of other applications.
- Ultra bright display of sixty LEDs for clear visibility.
- Measurement range of 6 – 90% WME for versatility.
- Supplied with pouch moisture probe calibration check device and wood calibration table.

Protimeter Hygrometer – Humidity Meter
- Used in conjunction with the detachable Hygrostick probe is easy to use versatile hygrometer.
- Large LCD displays RH ambient and dewpoint temperatures.
- Embeddable hygrosticks can be used to measure the equilibrium RH value of walls and floors.
- May be used with optional surface temperature probe.

Protimeter Surveymaster – Moisture Meter
- A dual function instrument which combines the proven two-pin inspection method (the MEASURE Mode) for surface dampness with a non-destructive radio frequency technique (the SEARCH Mode) for below surface dampness.
- Protimeter colour-coded LCD display in both Modes plus LCD display in the Measure Mode and audible alarm in the Search Mode.
- Range: 7% WME to fibre saturation and well beyond (up to 100%).
- Resolution ±1%.

Protimeter Aquant – Moisture Meter
- Used to assess and monitor relative moisture level of materials including plaster, masonry concrete and fibreglass (GRP).
- Simply hold the Aquant against the surface of the material under investigation.
- Relative moisture levels are measured by radio frequency to a nominal depth of 10-20mm.

Protimeter Timbermaster – Moisture Meter
- The instrument of choice for quality control applications across the wood industries from the sawmill to finished products.
- Moisture values are automatically connected for temperature when the temperature probe is used.
- May be used with optional hammer electrode (35443) for sub-surface measurement.

Protimeter MMS – Moisture Measurement System
- Designed for measuring moisture conditions in buildings to aid understanding of why damp conditions may prevail.
- Combines moisture meter and hygrometer in one state-of-the-art instrument for a complete moisture surveying capability.
- Also has a complete on-board data logging facility when used with Protimeter Moisture Measurement System Data Logging Software information captured by the Moisture Measurement System can be transferred to a PC.

Price
Product Code Description Price per Unit
£132.00
354800 Protimeter Mini
£210.00
354200 Protimeter Hygrometer
£250.00
354700 Protimeter Surveymaster
£265.00
354400 Protimeter Aquant
£537.00
354750 Protimeter Timbermaster
£633.00
354950 Protimeter MMS

Spirit Levels

Stabila 96-2 Professional Spirit Level
- Extra strong ribbed frame.
- Three vials – one horizontal and two vertical.
- Removable end caps – incorporating anti-slip wall pads which allow the level to be held firmly against a wall with one hand without slipping.

Price
Product Code Description Price per Unit
£47.25
STB-17968 Magnetic Boat Level
£59.95
£79.95
£115.00
STB-17768 Stabila Pocket Pro Magnetic

Stabila Pocket Pro Magnetic
- The Stabila Pocket Pro Magnetic is a professional quality spirit level that fits in the pocket, or can be attached to a belt with the clip supplied.
- This little compact level has strong magnets that hold the level in place on horizontal or vertical surfaces.

Price
Product Code Description Price per Unit
£10.45
STB-17768 Stabila Pocket Pro Magnetic

Stabila 2D Level
- Two vials set at right angles to enable all planes to be levelled in one action.

Price
Product Code Description Price per Unit
£5.95
STB-1KRW Stabila 2D Right Angle Level

Stabila 815M Boat Level
- Handy light metal casing in an especially slim form – extremely sturdy.
- Super-powerful Stabila magnets provide a secure hold.
- Light metal die cast profile with milled measuring surface, 1 vertical vial, 1 horizontal vial.

Price
Product Code Description Price per Unit
£34.79
STB815M-25 Magnetic Boat Level with Pouch

Stabila B35 Range
- Pressure Die-Cast Frame with 2 milled measuring faces.
- Three vials, the horizontal vial to be viewed from 4 sides and the vertical vials from 3 sides.
- Accuracy to ±0.5mm per metre in normal and 0.75mm/m vial down positions.

Price
Product Code Description Price per Unit
£49.95
STB81SM-25 Magnetic Boat Level

Stabila 83S
- Accuracy to +-0.5mm per metre in normal and 0.75mm/m vial down positions.

Price
Product Code Description Price per Unit
£59.95
STB83S-80 800mm Length
£84.00
STB83S-100 1000mm Length
£115.00
STB83S-40 400mm Length

Stabila 2
- The Stabila 2 is a professional quality spirit level with Belt Holster.

Price
Product Code Description Price per Unit
£34.79
STB-17768 Stabila Pocket Pro Magnetic

Stabila 81SM
- The Stabila 81SM is a professional quality spirit level that fits in the pocket, or can be attached to a belt with the clip supplied.
- This little compact level has strong magnets that hold the level in place on horizontal or vertical surfaces.

Price
Product Code Description Price per Unit
£84.00
STB81SM-25 Magnetic Boat Level
Measuring Tapes

Fisco ‘Ranger’ Fibreglass Tape
- Highly flexible 13mm wide tape.
- Constructed from multiple uni-directional glass-fibre strands embedded in PVC.
- Claw end fitting.

Product Code | Description                  | Price per Unit
-------------|------------------------------|-----------------|
41131        | 30m Fisco Ranger             | £24.80          |
41132        | 30m/100’ Fisco Ranger        | £24.80          |
41151        | 50m Fisco Ranger             | £36.80          |
41152        | 50m/165’ Fisco Ranger        | £36.80          |

Fisco ‘Pacer’ Steel Tape
- Robust steel tape designed for use in difficult terrain and adverse conditions.
- ABS frame fitted with a ground spike.

Product Code | Description                  | Price per Unit
-------------|------------------------------|-----------------|
40130        | 30m Fisco Pacer              | £43.80          |
40131        | 30m/100’ Fisco Pacer         | £43.80          |
40150        | 50m Fisco Pacer              | £64.05          |
40151        | 50m/165’ Fisco Pacer         | £64.05          |

Fisco ‘Surveyor’ Steel Tape
- Heavy duty, high specification open frame tape designed for the professional user.
- Extra thick Tufcote nylon coating for added protection.
- Press button firm blade lock with simple lock release.
- Rubber grip top handle and lower base grip.
- Integral ground spike for end-hook anchoring.

Product Code | Description                  | Price per Unit
-------------|------------------------------|-----------------|
40135        | 30m Fisco Surveyor           | £49.50          |
40136        | 30m/100’ Fisco Surveyor      | £49.50          |
40137        | 50m Fisco Surveyor           | £73.80          |
40138        | 50m/165’ Fisco Surveyor      | £73.80          |

Fisco ‘Big T’ Tape
- Quick release belt clip
- Tough rubber protection
- Rubber grip tip

Product Code | Description | Price per Unit
-------------|-------------|-----------------|
38062        | ‘Big T’ 5m   | £11.30          |
38063        | ‘Big T’ 5m/16’ | £11.30       |
38085        | ‘Big T’ 8m   | £15.10          |
38086        | ‘Big T’ 8m/25’ | £15.10       |

Fisco ‘Tuf-Lok’ Tape
- Tough shock absorbing ergonomic case with rubber-like outer casing.
- Detachable belt clip.
- Self-erasing end-hook.

Product Code | Description | Price per Unit
-------------|-------------|-----------------|
38058        | ‘Tuf-Lok’ 5m | £4.60           |
38059        | ‘Tuf-Lok’ 5m/16’ | £4.60       |
38087        | ‘Tuf-Lok’ 8m  | £7.55           |
38088        | ‘Tuf-Lok’ 8m/25’ | £7.55      |

Measuring Wheels

Measure-Mark Road Wheel
- Heavy-duty precision measuring wheel for reliable out-door measuring under most terrain conditions.
- Spoked Wheel for strength.
- Accurate to ±0.5%.
- Yellow Enamelled finish for safety.
- Measures to 9999.99m reading to 1cm.
- Optional rail track adaptor which clamps the wheel securely to rails.
- Reset lever for quick resetting.
- Robust – all metal construction.
- The wheel diameter of 318.5 mm gives a precise circumference of 1 metre.

Product Code | Description                  | Price per Unit
-------------|------------------------------|-----------------|
490010       | Measure-Mark Wheel           | £110.00         |
490040       | Measure-Mark HD Wheel        | £140.00         |
49008        | Bag for Measuring Wheel      | £12.80          |
49010        | Rail Track Adaptor – Pair    | £73.00          |

Trumeter Road Measurer
- A precision measuring wheel.
- Folding handle and pistol grip.
- Clear easily read 7mm high figures in the six figure mechanical counting head.
- A reset lever returns the counter reading to zero at any time.
- Supplied complete with bag.

Product Code | Description                  | Price per Unit
-------------|------------------------------|-----------------|
49210        | Road Measure – Metric        | £97.00          |

Trumeter Measurer & Measurer Revolution
- With many unique features Measurer Revolution should be the first choice for all your distance measuring applications.
- Fitted with a 1m circumference wheel you have the option of electronic or mechanical versions.
- Large easy-to-read display or LCD.
- Accuracy ±1%.

Product Code | Description                  | Price per Unit
-------------|------------------------------|-----------------|
49205        | Measurer Revolution – Digital| £53.80          |
49206        | Measurer Revolution – Mechanical| £53.80   |
49820        | Protective Bag               | £19.00          |

Heavy Duty Rail Wheel
- A precision measuring wheel.
- Folding handle and pistol grip.
- Clear easily read 7mm high figures in the six figure mechanical counting head.
- A reset lever returns the counter reading to zero at any time.
- Supplied complete with bag.

Product Code | Description                  | Price per Unit
-------------|------------------------------|-----------------|
493210       | Heavy Duty Rail Measurer Wheel – Metric | £375.00     |
493240       | Heavy Duty Daulutch Rail Wheel – Metric | £485.00    |
493250       | Heavy Duty Rail Wheel – Metric/Imperial | £475.00   |

Feature | Benefit
---------|---------|
Accuracy 99.5% | Reliable Measurements|
Stainless Steel | No rust or weak points|
Adjustable Handle | Height adjustment for ergonomic comfort|
Dual Counter Option | Unconnect Counter|
Dual Counter Option | Complete protection of drive mechanism|
**Rules**

**Scale Rules**
- 150 and 300mm Long
- Oval or Triangular shaped in a material manufactured to comply with BS: 1347: 1985.
- Unequalled for clarity and legibility

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>48152</td>
<td>150mm No. 2 Dural Metric Scale Rule</td>
<td>£9.15</td>
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<tr>
<td>48153</td>
<td>150mm No. 3 Dural Metric Scale Rule</td>
<td>£9.15</td>
</tr>
<tr>
<td>48154</td>
<td>150mm No. 4 Dural Metric Scale Rule</td>
<td>£9.15</td>
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<tr>
<td>48302</td>
<td>300mm No. 2 Dural Metric Scale Rule</td>
<td>£13.50</td>
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</tr>
<tr>
<td>48304</td>
<td>300mm No. 4 Dural Metric Scale Rule</td>
<td>£13.50</td>
</tr>
<tr>
<td>48401</td>
<td>300mm Metric 'A' Triangular Scale Rule</td>
<td>£22.90</td>
</tr>
<tr>
<td>48410</td>
<td>300mm Academy Triangular Scale Rule</td>
<td>£10.30</td>
</tr>
</tbody>
</table>

**Steel Rule**
- Steel rule with mm/cm graduations 1/16 1/32 and 1 inch markings on one side and conversion tables on the other.
- 29mm wide 0.8mm thick.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>45020</td>
<td>300mm Scale Rule</td>
<td>£3.50</td>
</tr>
</tbody>
</table>

**Government Stamp Brass Rule**
- High quality brass counter rule.
- Metric graduations: 1m/36” 8ths on top edge mm figured cm on bottom edge.
- Deep etched black figures and graduations.
- Government stamped.

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>45026</td>
<td>Stamp Brass Rule 1m/36”</td>
<td>£3.50</td>
</tr>
</tbody>
</table>

**Fisco Surveyor’s Rods**
- Multi-fold rule made from top quality hardwood
- Ends capped with rolled brass
- Treated twice for extra durability

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Description</th>
<th>Price per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>45210</td>
<td>2m Surveyor’s Rod</td>
<td>£24.80</td>
</tr>
<tr>
<td>45220</td>
<td>2m/6 Surveyor’s Rod</td>
<td>£24.80</td>
</tr>
</tbody>
</table>

**Chartwell Field Books**
Chartwell field books are made to the highest specification using quality strength paper with high cotton content. They provide excellent tear resistance when wet. Strength and writing surface is retained when dried even after being subjected to extreme weather conditions. All books come with 180 pages printed with permanent waterproof ink. Covers can be wiped clean, fold flat, and are sewn in sections with nylon thread to withstand the most demanding environments.

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2426</td>
<td>Collimation Load Book</td>
<td>£10.95</td>
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Opti-cal offer a wide range of used second hand, ex demo and reconditioned survey equipment and laser instruments, all coming with a minimum 3 months parts and labour warranty and 1 year calibration certificate. By purchasing reconditioned survey equipment from us you will have fully calibrated equipment as if it were new, saving on depreciation but not compromising on quality.

Need to sell your Leica surveying equipment? We can give you a competitive quote.

Trade-in options available for all surveying equipment
Simply contact us with the details 01189 820 500 or email sales@surveyequipment.com

Our stock extends to external resources, and due to the high demand for second-hand, ex-demo, used and re-conditioned surveying equipment it is advisable to check for the latest deals. If you have any specific survey equipment requirements but cannot see what you require here, please do contact us to check availability.

Finance Options

Opti-cal offer a range of plans through our partnering leasing company Academy Leasing Ltd. The following plans are available by contacting Academy direct on 01842 324 455 (www.academyleasing.com).

Finance Lease
This lease plan simply funds the use of your chosen equipment. As your company leases the equipment, monthly rentals are tax deductible. Variable payment patterns, including low initial rental, are available, so you also benefit from low capital outlay.

After the primary period, the lease can be extended into a secondary period for a single nominal rental.

At the end of the lease agreement you may sell the equipment (as an agent for the finance company), or return it to the finance company to sell. A proportion of the sale proceeds, typically 95% plus, are returned to you as a refund of rentals.

- Low Deposit
- Various Payment Patterns
- Proportionate Rebate of rentals from sale proceeds
- Nominal Secondary Rental

Hire Purchase
A traditional form of purchase finance, Hire Purchase offers ownership of the equipment. Low deposit terms (all the VAT element payable on signing) make ownership even more accessible. The price of payment is fixed. Interest is simply calculated on the length of the agreement and the amount financed.

At the end of the payment term, a nominal “option to purchase” amount will result in ownership of the equipment.

- Fixed monthly payments
- Ownership

Contract Hire
Contract hire is an ideal product for companies who do not want the ownership of equipment and are therefore able to treat this as off-balance sheet funding. Your company simply hires the equipment from the Contract Hire Company for a predetermined period at a fixed monthly rate. The Contract Hire Company retains ownership of the equipment, and the risks associated with them. At the end of the contract the equipment is returned to the Contract Hire Company.

- Off Balance Sheet
- Maximum Cash-flow Benefits
- No Depreciation risk
- Low Deposit
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