Survey and Safety Equipment Hire

Opti-cal Survey Equipment is a well-established industry-leading supplier of land survey and precision measurement technologies. We sell, hire and service new and re-conditioned land survey and laser equipment.

Opti-cal is constantly evolving to provide innovative solutions to meet the ever-changing requirements of our customers, whatever their application.

Our partnership with Leica Geosystems, Topcon, Trimble, FARO Technologies, GeoSLAM and SPX Radiodetection; as well as software suppliers Applications in CADD with n4ce and Pix4D with Drone Mapping; mean that we match world-class instrumentation with effective service and unrivalled technical expertise.

Our mission is to supply you with the latest equipment for the job in-hand at competitive prices and support you all the way through to project completion.

- Industry-leading supplier of land survey and precision measurement technologies
- Service and distribution partnership with Leica Geosystems, FARO Technologies and SPX Radiodetection
- Supporting professionals from Engineering, Construction, Archaeology and Forensics
- Our state-of-the-art Hire Fleet consists of the very latest equipment available
- Comprehensive instrument calibration, servicing and repairs on a wide range of survey equipment
- Certified technical experts, to guide you through your project
- Finance packages for business offer you ultimate flexibility when purchasing new equipment
- With service centres nationwide, we have the whole of the UK covered

Sales
- Free demonstrations
- Full training
- Finance packages available
- Dedicated technical support

Service
- Leica factory-trained technicians
- 5-day turn around
- Fully accredited service centres
- Repair available

Hire
- Nationwide coverage
- On-site training available
- Dedicated technical support
- Hire Fleet

Finance Options
- Finance Lease
- Hire Purchase
- Contract Hire

Service Centres Nationwide

**Billingham**
Buildings 4 & 5, West Site Works
Haverton Hill Road
Billingham TS23 1PS
01642 566119

**Cardiff**
East Bay Close
Tndernall Fields
Cardiff CF10 4BA
029 2046 1462

**Gatwick**
Unit 3, The Pavilions
Brighton Road, Pease Pottage
Crawley RH11 9BJ
01293 538730

**Manchester**
Broadoak Works, Harper Road
Sharston Industrial Area
Manchester M22 4RA
0161 998 9423

**Reading**
3 Orpheus House
Calleva Park, Aldermaston
Reading RG7 8TA
0118 982 0500

**Bristol**
Unit 6, Eagles Wood Business Park
Woodlands Lane, Bradley Stoke
Bristol BS32 4EU
0117 959 5810

**Coalville**
Unit B Brunel Way
Stephenson Industrial Estate
Coalville LE67 3HF
01530 832382

**Livingston**
14 Sharps Business Park
Houstoun Road
Livingston EH54 5FD
01506 674990

**Milton Keynes**
Unit 3, Ro 24 Twizel Close
Stonebridge
Milton Keynes MK13 0DX
01908 683726

**Wakefield**
5A, South Park Way
Wakefield 41 Business Park
Wakefield WF2 0XJ
01924 792183

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Support
01293 565565
support@surveyequipment.com

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Our state-of-the-art Hire Fleet consists of the very latest equipment available; from Automatic Levels, Rotating Lasers and Pipe Lasers, to Total Stations, GNSS Solutions, 3D Laser Scanners and UAV’s.

Held at our Service Centres nationwide, the Opti-cal Hire Fleet is maintained to the very highest of standards and is subjected to regular maintenance, service and calibration in our Leica fully certified workshops.

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<th>Equipment Type</th>
<th>Description</th>
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surveyequipment.com
Robotic Total Stations

Leica total stations are equipped with unsurpassed angle, distance and reflectorless technology, and come with a powerful suite of on-board programs, multiple sensor and accuracy settings, which provide ultimate reliability both on and off-site.

Leica Viva TS16 Robotic Total Station

Automatically adjusts to any environmental conditions, the Leica Viva TS16 locks onto your, and only your target, regardless of how challenging the task or the amount of distractions in the field. This total station sees exactly what you see; capture exact conditions for any worksite through the self-learning capability of the Leica Viva TS16.

The world’s first self-learning total station

Leica Viva TS15 Robotic Total Station

The Leica TS15 builds on Leica’s experience of creating top quality measuring tools. Bringing you the world’s best total station with; sensors, angle measurement, long distance surveying and the patented PowerSearch prism recognition.

An instrument that you can rely on for years

Leica Viva CS15 Field Controller

Designed for extreme environments, you can always rely on the CS15. This field controller is perfect for use with SmartWorx Software and works alongside all Viva total stations and GNSS sensors.

Ideal for use with the TS15 and TS12 total station

Leica Viva TS12 Robotic Total Station

The Leica TS12 is packed with features, such as the unique PowerSearch sensor which finds prisms regardless of their location in seconds, and the lightweight Leica CS15 controller provides secure wireless connectivity to the total station. Together with the easy-to-use Leica SmartWorx Viva software, robotic surveying has never been so easy and productive.

High quality rugged total station

Leica Viva CS20 Field Controller

Providing ultimate control and convenience with complete mobility, the touchscreen technology allows for comfortable and quick data processing, while a stunning 3D view transforms your Leica Viva GNSS and Leica Nova scanning experiences.

Complete control of your entire office on the go
The Leica Nova MS60 MultiStation is the world’s first self-learning MultiStation, automatically and continuously adapting to any environment, despite any challenges.

Scanning with the Leica Nova MS60 has been made simpler through the instant creation of point clouds with overlaid measured points and 3D models in any view.

The new experience in measuring technology

The TM50 is the ultimate tool when it comes to fulfilling your complex monitoring and measuring requirements.

With state-of-the-art image processing technology, the TM50 delivers the highest quality image for complete visual documentation of the monitoring environment. The TM50 is capable of monitoring environmental and structural movements down to millimetre accuracy.

Every half-second counts

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.

Accurate, Fast, Silent

Making measurement capture easier than ever before, the easy-to-use total stations supplied by Opti-cal are fast and reliable. With accurate angle measurements, quadruple axis compensation, powerful reflectorless EDM and data output in any format, they are perfect for all surveying and engineering work.

The TS06 offers complete flexibility, and is designed for mid-accuracy applications. As standard, this total station comes with an alphanumeric keyboard and a complete set of application software. To make usage more convenient, the TS06 uses Bluetooth wireless technology to connect to any data collector.

Industry standard total station
**Leica Viva GS08plus GNSS NetRover**

Leica iCON GPS 60 SmartAntenna, working in combination with Leica iCONstruct field solution, is the perfect tool for any positioning tasks on any construction site. Featuring superior GNSS technology and integrated communication options, it enables you to carry out reliable positioning tasks on site much faster than before.

**Leica Viva GS16 SmartRover - Unlimited with UHF Radio**

The Leica Viva GS16 is the most compact and powerful, self-learning GNSS SmartAntenna, on-site real-time centimetre accuracy is achieved. Working with leading RTK technology, the GS16 meets the highest standards in measurement excellence with RTKplus and SmartLink.

**Leica Viva GS08plus GNSS NetRover**

The Leica Viva GS08plus provides you with the most compact and cable-free GNSS receiver setup. Lightweight but flexible, the GS08plus is the right choice for a wide range of surveying tasks.

**Leica iCON GPS 60 SmartAntenna**

The Leica iCON GPS 60 GNSS Smart Antenna, working in combination with Leica iCONstruct field solution, is the perfect tool for any positioning tasks on any construction site. Featuring superior GNSS technology and integrated communication options, it enables you to carry out reliable positioning tasks on site much faster than before.

**Precise positioning on any construction site - ideal for Machine Control**
Opti-cal has the youngest and most up-to-date Hire Fleet of Machine Control equipment, delivering a complete solution from initial evaluation and consultation, through installation, service and support.

With a dedicated Machine Control installation and support team we are always on-hand to discuss your needs, help with site data and installation.

3D Systems

Providing maximum performance and efficiency these excavator systems can handle complex excavating jobs with ease while maintaining high accuracy, saving time and cost by eliminating grade checking and reducing work.

Leica iCON grade iCP42 Dozer System

The ICP42 is an ideal tool for increasing productivity in all aspects of the construction earthmoving industry. The iCP42 can be used to determine the position of a drill bit, piling rig, an excavator bucket, a dozer or grader blade, or a roller wheel.

Ideal tool for the construction earthmoving industry

Leica iCON excavate iCP41 Excavator System

The ICP41 is designed for harsh and dusty environments, connection cables, or power supply plugs are not necessary. With a keypad and a 7” touch-screen the iCP41 is possible to use in sunny environments making it great for any construction site.

Designed for work in harsh environments

Topcon GX-55 3D GPS for both Dozers and Excavators

The bright and robust GX-55 delivers the highest quality graphical interface experience for modern machine control. The GX-55 is designed to handle rugged field conditions as well as harness powerful processing power to instantly display real-time position and project design information.

Light bars for visual grade reference
2D Systems

Excavate a range of profiles including level, gradients, dual slopes and trenches.

Leica iCON iGD2 – 2D System

The Leica iCON iGD2 system provides automatic control of both slope and elevation. Adding an extra mast and laser sensor allows for independency on the slope direction.

This system can dramatically increase machine utilisation, productivity and optimise material usage on any earthmoving and fine-grading contract.

Intelligent 2D grading solution for dozers

Topcon System 5 2D Machine Control System

System 5 is a complete machine control package including advanced single, dual, or 3D control box, each with an easy-to-use and easy-to-learn operator interface.

In addition the System Five hydraulics provide the worlds smoothest, most consistent response; and its slope sensor allows for the highest slope capabilities for precise material control on every job.

A motorised receiver on the Trackerjack Laser Receiver gets on-grade and ‘locks-on’ to keep it there, with a bright grade LED display all grade information is continuously visible.

High-resolution sonics for application versatility using references such as: elevated stringline, surface string, poured curbs, or an existing surface are produced by the Sonic Tracker II.

100% slope capable, with exclusive anti-slosh ceramic technology is achieved with the Slope Sensor.

Perfect for site and road work

3D Total Station Machine Control Systems

Leica iCON iGD 3D Grading System

Revolutionise the way you move dirt and fine-grade, and boost productivity. The 3D system brings design surfaces inside the cab. The system integrates Leica iCON telematics which enables you easy transfer from office to machines, remote support and basic fleet management via the telematics website.

Maximise your machine utilisation

Topcon X-53i 3D Indicate Control for Excavators

This trim 3D excavator system provides modern tools when excavating complex slopes or even while working ‘in the blind’. Bucket movement is tracked in real-time, delivering key information to reach grade repeatedly.

Work independently
Opti-cal understands that Laser Scanning is an increasingly popular tool for collecting vast amounts of accurate spatial data within a short amount of time. With this in mind, we have a selection of Laser Scanners and Hand-held Scanners available, with software and accessories.

**FARO Focus M70 Laser Scanner**

The ultra-portable Focus M70 enables fast, straightforward and yet accurate measurements of small construction sites, small scale façades, complex structures, production and supply facilities.

*70m range per scan*

**FARO Focus® 350 Laser Scanner**

FARO’s Focus® 350 Laser Scanner enables you to capture fast, straightforward and accurate measurements of complex objects and buildings.

*Extra-long scan range of 350m*

**FARO Focus® 150 Laser Scanner**

The ultra-portable Focus® 150 enables fast straightforward and ultra-high accurate measurements of objects and buildings.

*150m range per scan*

**FARO Design ScanArm**

FARO’s ScanArm features optically-superior blue laser technology with fast scanning speeds to deliver high-resolution point cloud data and, the ability to seamlessly scan challenging materials without the need for spray or targets.

*High resolution point cloud data*
**FARO Focus 3D X330 Laser Scanner**

The Focus 3D X330 can scan large and distant objects up to 330 metres away and in direct sunlight. With its integrated GPS receiver, the laser scanner is able to correlate individual scans in post-processing, making it ideal for surveying-based applications.

*The smallest and lightest scanner on the market*

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**FARO Focus 3D X130 Laser Scanner**

The ultra-portable Focus 3D X130 enables fast, straightforward and accurate measurement of objects and buildings. It records architectural façades, complex structures, production and supply facilities, accident sites, and large-volume components.

*Integrated GPS receiver*

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**FARO Scanner Freestyle 3D**

The Freestyle 3D is the only industrial grade hand-held device allowing you to scan all kinds of surfaces and environments. With its versatile design, small size, and light weight it can be used flexibly to perform scanning tasks, especially in hard-to-reach areas.

*Hand-held scanner for professionals*

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**GeoSLAM ZEB-CAM Laser Scanning Camera**

ZEB-CAM is the new add-on option for the ZEB-REVO that adds contextual imagery to your scan data, and is available for both new and existing REVO customers.

*Adding vision and context to your 3D scan data*

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**NCTech iSTAR 360 Degree Rapid Imaging Panoramic Camera**

Designed for rapid 360° imaging, iSTAR is a panoramic camera that precisely captures full spherical immersive images and high resolution panoramic data streams for efficient visual documentation of an environment.

*High resolution still images and video*

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**GeoSLAM ZEB-REVO Laser Scanning System**

The ZEB-REVO is an incredibly versatile laser scanner which is very simple to use. It can be mounted onto your chosen mobile platform such as a vehicle or UAV, or used as a hand-held scanner with a pistol grip.

*Versatile hand-held laser scanner*
Leica ScanStation P40
3D Laser Scanner

The ScanStation P40 offers highest versatility including long-range capabilities. Delivering outstanding range, speed and data quality whenever and wherever needed it is the perfect solution for any tasks in 3D laser scanning.

Scan range up to 270m

Leica ScanStation P30
3D Laser Scanner

The ScanStation P30 is a high versatility scanner suitable for a wide range of typical scanning solutions. With its optimal mix of speed, range and accuracy paired with unmatched robustness, it is the all-in-one solution for the most comprehensive variety of applications.

Scan range up to 120m

Leica ScanStation P16
3D Laser Scanner

Combining high quality and performance with the highest environmental robustness on the market, the Leica ScanStation P16 is the perfect entry into the world of 3D laser scanning. Its attractive price-performance ratio and user friendly interface make it an attractive solution even for the non-surveying user.

Scan range up to 40m

Airborne Surveying

The use of Unmanned Aerial Vehicles (UAV’s) to carry out survey and inspection work has become increasingly widespread over the last few years due to significant advances in UAV and photogrammetry technology.

Opti-cal have the knowledge and skills to be able to support your entry into the world of Aerial Survey work. We can advise you on getting the right UAV and sensors for your line of work and provide full training and support when it comes to processing your data into 2D and 3D models.
DJI Matrice 210 UAV

The DJI M210 is a versatile platform, designed to work in adverse conditions, offering a range of payload options and includes a single upward facing gimbal and dual downward gimbals. Not only is the M210 IP43 rated (dust and waterproof), it also features DJI's latest generation battery system which pre-heats the batteries to optimum flying temperature ahead of take-off.

Feature-rich UAV

DJI Matrice 600 Pro UAV

The Matrice 600 can be set up in minutes – thanks to the modular design which makes it ideal for land survey. The Matrice 600 features an extended flight time and 5km long-range, ultra-low latency HD image transmission for accurate image composition and capture.

Complete flight platform

DJI Inspire 2

The Inspire 2 takes everything that was good about the Inspire 1 and improves it. An all-new image processing system records at up to 5.2K in Cinema DNG RAW, Apple ProRes and more. A dual battery system prolongs the flight time to a maximum of 27 minutes, while self-heating allows it to fly even in low temperatures.

Power beyond imagination

DJI Inspire 1 Pro UAV

This ready-to-fly aerial system is the perfect entry into the world of aerial survey. The DJI Inspire 1 Pro can take off with a maximum weight of 3,400g and has a continual flying time of approximately 20 minutes.

The next evolution of aerial cameras

DJI Zenmuse Z30 Aerial Camera

Designed to seamlessly integrate with DJI's Matrice series of airframes, the Zenmuse Z30 works right out of the box and gives access to the intelligent features DJI is known for.

Seamless integration

DJI Zenmuse X5S Aerial Camera

Equipped with an uprated Micro 4/3 sensor, the Zenmuse X5S has a dynamic range of 12.8 stops with a much improved signal to noise ratio and colour sensitivity than the X5R. It supports up to eight standard M4/3 lenses with focal lengths ranging from 9mm-45mm, allowing more creative flexibility.

Aerial Imagining

DJI Zenmuse X5R Aerial Camera

Get ready to experience the wonder of RAW. The Zenmuse X5R is the world’s first Micro Four Thirds aerial camera capable of recording lossless 4K videos in RAW.

Record the world in RAW

DJI Zenmuse XT Thermal Aerial Camera

Thermal imaging from the air has never been as easy as it is with the DJI Zenmuse XT. By combining DJI’s unrivalled expertise in gimbal technology and image transmission with the industry-leading thermal imaging technology of FLIR, the Zenmuse XT is the ultimate solution for rapid and reliable aerial thermal imaging.

Integrated Thermal Camera
We stock the most comprehensive range of surveying levels available on the market today, in order to give you the widest choice when it comes to selecting the right instrument for your project.

We offer Leica Geosystems Levels, both Optical and Digital, from Automatic (Dumpy) Levels through to precise optical or digital Levels – all at extremely competitive prices – and with their ease of use there is no need to spend significant time in training.

Leica’s ergonomic optics are among the finest in the world, ensuring absolute accuracy even in extreme light conditions, and can be configured to suit individual working preferences. With truly shock-resistant housing, the levels will continue to work even after a fall.

Leica GST103 Aluminium Tripod & Staff

Leica LS15 Digital Level

Engineered and manufactured by the industry-leader of digital levels, the LS15 offers experienced measuring professionals automated comfort and reliable accuracy while measuring any demanding levelling project for roads, railways, bridges or in authoritative first order levelling networks.

Digital level with industry-leading accuracy

Leica DNA03 Digital Level

The Leica DNA03 is a high precision digital level developed for high levelling work. The “Meas & Rec” function lets you easily measure and record height differences, while the line levelling application program guides you securely through the different possibilities of measuring whole level lines.

The second generation of digital levels

Leica NA2 Precise Automatic Level

The 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 is reliable.

Top-class optical quality

Leica NA720 Automatic Level

Nothing stops the Leica NA720 Automatic Level – not even a short drop onto the ground, a fall into water or vibration from heavy machinery – it just carries on working. The “best-in-class” optics enable you to always work as precisely as possible, even in twilight.

Built for builders, engineers and surveyors
Construction Lasers

Opti-cal offers a wide range of Rotating Lasers, Pipe Laser and Dual Grade Lasers, for use on any project. We want to ensure the success of your projects, which is why we only supply products that provide a high level of reliability, accuracy and robustness, even under the toughest conditions.

Leica Rugby 880DG Laser Level

The Leica Rugby Grade Laser provides contractors with ultimate grade reliability and accuracy. The Rugby 880DG is the only grade laser on the market that guarantees continuous high laser accuracy, even under harsh conditions. Increase productivity by using the axis alignment and smart targeting functions – let the laser do the job for you!

Continuous high laser accuracy

Leica Rugby 280DG Laser Level

The Rugby 280DG is a multipurpose laser ‘plus’ with fully automatic, dual grade capability. It has a bright red beam, plumb, scan mode as well as horizontal and vertical self-levelling, plus dual grade up to 15 on both axes.

Multi-purpose laser

Leica Rugby 620 Laser Level

The Leica 620 is a self-levelling horizontal and manual slope in one axis general construction laser level. This laser squares, aligns and levels faster and easier, increasing work performance by eradicating errors and downtime.

Self-levelling
The Leica rotating self-levelling horizontal laser provides accurate results with just one click. Rugby Lasers are the toughest rotating lasers in construction, making levelling, aligning and squaring much quicker than ever before, eliminating costly errors and downtime.

Intelligent, versatile and a clever solution

Leica Rugby 810 Laser Level

The Piper 100 Pipe Laser comes with an optional remote control, a rechargeable Li-ion battery, charger and target assembly, making this laser powerful and compact. The unique design means that the laser can fit inside a 100mm (4 inch) pipe. The Piper 100 is fully loaded with features that will improve productivity and minimise downtime on projects.

World’s smallest pipe laser

Leica Piper 100

The Leica Rod Eye family of receivers offers solutions for general construction and interior applications. They are engineered to the highest standard and work seamlessly with the Leica Rugby laser portfolio.

A complete solution

Leica Rod Eye Laser Receivers

Opti-cal offers the most reliable and site tough equipment for the rail industry. Through a wealth of experience we have partnered with many of the major contractors on prestigious projects. We offer a wide range of equipment to suit your needs from Track Renewals and Tamping to rail associated Infrastructure projects.

Rail
The Amber is an ultra-portable hand-pushed track measuring device. Measuring in real-time results are displayed in an easy-to-read numerical format. GPS enabled allows for correlation between collected measurements and geographical positioning. Two tolerance levels for each measuring parameter with audible and visual exceedance alarm.

Track geometry parameter measurement

The Platform Gauge is designed to help set the platform coping stones to the rail. It achieves this by measuring both height and distance from the outside rail running edge, on a level between both rails.

Non-conductive – for use in 3rd and 4th rail areas

A hard wearing and non-conductive laser height and stagger gauge that measures the height and stagger of the overhead cantenary wire. Take quick and accurate measurements from a standing positions minimising user fatigue and time on the track.

Quick and accurate measurements

The Leica 410DG Laser is ideal for measuring slopes as it has an operating range of 2,600 feet and can be used in any indoor or outdoor application. Capable of tilting on both axes, the Rugby 410DG gives accurate measurements.

Real-time grade matching and self-leveling

MQ Statieven is the Rail Industry standard for Machine Control tripods. The tripod is strong, robust and with internal leg stabilisers it gives your equipment a sturdy platform to operate from.

- Min height 1.57m
- Max height 3.31m
- Transport height 1.73m
- Weight 12kg

Rail industry standard

Motorola offers the best, two-way radio functionality with the latest digital technology. The DP4400e Series integrates voice and data seamlessly to offer enhanced features that are easy-to-use.

Your voice just got clearer
Detection

Whether you are looking for Cable Avoidance, Precision Location or Cover Meter equipment, Opti-cal has a wide range of instrument options to suit your individual needs.

These innovative tools have been engineered to deliver a step change in capabilities, with minimal change in work practices and training requirements.

The Leica DS2000 Utility Detection Radar finds all potential threats including non-conductive pipes and fibre optics, increasing safety by lowering the risk of accidentally hitting underground assets.

Uncover faster and safer

The PS 1000 provides a real-time view of the inside of concrete structures and generates true images automatically for immediate on-site evaluation of scan data by the user. A compact all-in-one hand-held design offers easy, user-friendly, operation, quick start-up for speed of use plus, unmatched data visualisation.

Powerful tablet unit for in-depth, on-site scan analysis

The Hilti Ferroscan PS 250 provides a non-destructive means of locating reinforcing bars and measuring the depth of concrete cover. This complete, easy-to-use cordless detection system consists of a scanner, monitor and PC software.

Take a quick look beneath the surface

Leica DS2000 Utility Detection Radar

Hilti PS 1000

Hilti Ferroscan PS 250
The RD8100 is the most advanced locator range. With utility infrastructures becoming more complex, locate professionals require more powerful, flexible tools. Features such as Current Direction and iLOC combine with the versatile TX Transmitter Range to deliver highly responsive locates even in tough conditions.

Automatic usage logging with GPS positioning

SPX Radiodetection C.A.T4 and Genny4 range represents the latest evolution of the highly popular Cable Avoidance Tools, pioneered by Radiodetection, enabling operators to work more efficiently and safely.

The Radiodetection gC.A.T4 features built-in data logging and the GPS/GNSS receiver enables usage and location analysis and reporting.

Depth estimation capability with data logging

The multifunctional RD8000 range represents Radiodetection’s most advanced pipe, cable and RF marker locators, offering a wide choice of locate functions and advanced connectivity options. The RD8000 improves on speed, accuracy and reliability, yet remains a cost-effective solution delivering unique user features. Powered by a digital architecture, RD8000 delivers a highly controllable and reliable locate solution to service any industry, anywhere in the world.

Most advanced marker locators

The PS 50 helps to detect ferrous and non-ferrous metal, live cables, plastic pipes and other objects such as wood and cavities. Easy menu navigation for selection of the appropriate scanning mode for different base materials (concrete, wet concrete, floor heating, drywall, hollow brick).

Helps you drill right the first time

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Most advanced marker locators

Based on a fully digital platform, the family of Radiodetection transmitters has been designed to support the range of RD7000 and RD8000 cable, pipe and RF marker locators.

High current and induction capability

The EZICAT xf series is robust and easy-to-use, packed full of intelligent, well-known, beneficial features. Its extra lower frequencies make tracing buried utilities over long distances easy and efficient.

Network Rail Approved

Cable Detection EZiTEx xf Series

Signal Transmitters

The xf series of signal transmitters is compact, robust and easy-to-use. They have four frequencies and have been designed to trace buried utilities over long distances in conjunction with the EZICAT the xf series cable locators.

Enables depth estimation
Inspection Cameras

Opti-cal offers you the latest in imaging and recording, making contractors’ lives easier when underground pipework needs to be inspected.

vCam-5 Camera System

The vCam-5 Inspection Camera System gives you the flexibility to cover a range of inspections including indoor drain lines, municipal collection systems, residential plumbing, indoor commercial lines from three inches up to eight inches in diameter.

Vivax Camera System uses the latest technology packaged in a rugged, lightweight, compact profile made specifically for the harsh conditions related to sewer lateral inspections. The vCam-5 Camera System gives you the features you want as standard equipment, at a competitive fair price.

The latest technology in imaging and recording

SPX Radiodetection Standard Sonde

Measuring 39mm x 105mm, available in 3 frequencies with a locate depth of 5m.

Compact Sonde with a strong signal

SPX Radiodetection Sewer Sonde

Measuring 64mm x 168mm, it transmits on 33kHz and can be normally located to a maximum depth of 8m.

Standard sewer Sonde

SPX Radiodetection Super Sonde

Measuring 64mm x 318mm, it transmits on 33kHz and can be normally located to a maximum depth of 15m.

Deep sewer Sonde

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Deep sewer Sonde

Elcometer 331S

This easy to use gauge quickly and accurately identifies the location, orientation, depth and diameter of rebar as well as the potential for corrosion.

All-in-one rugged gauge

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All-in-one rugged gauge
Safety Equipment

As well as supplying Survey Equipment, Opti-cal also supplies Safety Equipment – we know that the safety of your employees is the number one priority when working on project sites. So, why not protect your workers with our range of safety equipment, designed for use on all work sites.

Abtech Safety Two-Person Tripod

The tripod is the basis of a confined space and rescue system giving strong, stable and portable anchorage points for fall arrest and recovery systems. The T3 has six anchor points which are tested to EN795 specifications.

Tripod stability

Abtech Rescue Harness

A full body harness with three attachment points. Dorsal (rear) and chest attachment points are both suitable for fall arrest and extended attachment points, which maintain the user at a near vertical suspension when being lifted or lowered in a work or rescue situation with limited access.

Full body harness

Casella Guardian2

Long-term site monitoring of noise, dust, vibration, wind speed and direction. The Guardian2 has been designed to be easy to install on-site and as soon as power is connected, all sensors are activated and data is automatically transmitted. With the ‘mHub’ logger with a built in ‘E-sim’ simcard, data is available in real-time from the Casella247.com website where a report can be produced for compliance.

Long-term site monitoring
Opti-cal offers both Technical Support and Training, and we understand that these are crucial to unlocking the full potential of your survey equipment. We offer structured training programs that enable you to take full advantage of your instruments capabilities, and help to improve the workflow both in the field and in the office.

We offer courses on Total Stations, Laser Scanners, GNSS Systems, Digital Levels and Cable Avoidance to ensure your employees are trained, developed and supported. With continuous training, employees stay up-to-date with the latest advances in the equipment used.

All published courses may be customised to your company’s requirements, allowing you to get the most from your training investments. Choose between training on-site, at your office or our locations. Alternatively, let us know what training you need and we will do our best to accommodate.

**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 perform common survey tasks, including detail surveys and setting-out.

**Check and Adjust (half-day)**
From refreshing batteries to running the check and adjust routines, this course takes you through the monthly steps needed to keep your instrument working correctly and accurately.

**Worksite+ (1-day)**
Getting to grips with three of the most popular additional applications on-board the TS16; Reference Line, DTM Stakeout and Volume calculation.

**Traverse (1-day)**
A close look at setting up and adjusting a control network. Step-by-step process of using the TS16 and Traverse Kit, including adjustments on-site as well as loading the data into Leica’s Infinity software and generating a final report.

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Abtech Fall Arrest Recovery Block

TORQ 15m Fall Arrest Recovery Device is designed to provide fall protection from falls at height. Anchored above the user, it gives the user a safe work area, and the retracting line pays in and out of the device as the user moves. In the event of a fall, a break engages, arresting the fall of the user with a controlled deceleration force.

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**Training**

**5X Multigas Detector**

The Altair 5X Gas Detector is capable of measuring up to 6 gases simultaneously and is now available with integrated PID sensor for VOC detection. Driven by advanced MSA Xcell Sensor Technology, the Altair 5X Gas Detector delivers faster response times, better stability, accuracy, longer service life, and cost savings over the life of the instrument.

*Flexibility and connectivity to meet your needs*

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**Altair 4XR Multigas Detector**

Outfitted with rapid-response MSA Xcell sensors the ALTAIR 4XR Gas Detector is the toughest 4-gas monitor on the market and is backed by a 4-year warranty. The ALTAIR 4XR can also provide real-time incident awareness to team members, supervisors, safety managers and others when paired with the MSA ALTAIR Connect app via a Bluetooth® wireless connection.

*Built on durability*

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**5-CAP-Air**

The compressed-air emergency escape device provides 15 minutes of life-saving respiratory protection in extremely toxic or oxygen-deficient environments. Featuring fast, automatic activation, fluorescent protective carrying bag, and three litres of 200 bar compressed air, this device is ideal for use on ships, offshore oil rigs, refineries, water utilities and confined spaces.

*Emergency life support*
**GPS/GNSS**

**Getting Started (1-day)**
Learn the basic concepts of GPS/GNSS positioning. This course looks at workflow training in RTK including detail surveys, coding and export of data, as well as performing site Calibration/Transformation and understanding when to use different types of co-ordinate systems.

**Post-Processed Kinematic (1-day)**
Focussing on GNSS PPK survey and processing - for when there's just no phone signal. For those who can post-process GNSS data and have a SmartNet License there are techniques available for when you don't have an internet connection. This course focusses on Post-Processed Kinematic surveys and how to get them right.

**GNSS Survey and Post Processing (1-day)**
A look at the GS16 SmartAntenna and how to take advantage of the developments in GNSS surveying. As well as looking at RTK setups and post-processing GNSS data in Leica’s Infinity software.

**Laser Scanning**

**Getting started Leica (2-days)**
Get hands-on with the Leica P Series, learn Cyclone Software for data processing, analysis and preparation, as well as a step-by-step guide to office and field workflows and processes.

**Getting Started FARO (2-days)**
With FARO’s S and M series comes SCENE software for data processing, analysis and preparation, learn the software and hardware of these Laser Scanners while taking a detailed look at office and field workflows and processes.

**Hand-Held Laser Scanning**

**Getting started (1-day)**
Learn the scanning methodologies of using a GeoSLAM hand-held laser scanner. This 1-day course will look at everything you need to survey with confidence: field practice, workflows, GeoSLAM Desktop software and data visualisation.

**Levelling and Infinity**

**Getting started (1-day)**
An introduction into the basic theory of how GPR works, their uses and limitations. Following on from the theory side the course then covers how to use the Leica DS2000 and all its available features, coupled with a practical session on using the Leica DS2000.

**GPR (Ground Penetrating Radar)**

**Getting Started (1-day)**
An introduction into the basic theory of how GPR works, their uses and limitations. Following on from the theory side the course then covers how to use the Leica DS2000 and all its available features, coupled with a practical session on using the Leica DS2000.

**C.A.T and Genny**

**User Training (half-day)**
Opti-cal is able to offer a certified training course on advanced theoretical and practical instruction in the techniques and uses of Radiodetection C.A.T and Genny Series Locators. This half day course can facilitate up to eight people and includes all equipment.

training@surveyequipment.com