Leica Geosystems
Construction Catalogue
Tools for any site

PART OF **HEXAGON**

leica-geosystems.com

- when it has to be **right**

Leica
Geosystems

Service & Support
Strongest warranty and calibration certification offering

Leica CalMaster
Professional calibration for maximum precision

Construction sites are harsh environments and put incredible strain on lasers. In the majority of construction projects, lasers face so many impacts that their accuracy can no longer be guaranteed. This can cause inaccuracy and thus, application mistakes may occur. As an example, a wrong reference height during concrete pouring can lead to structural and security issues. Such mistakes can be costly and result in reputation loss for the contractor. To ensure accurate and consistent performance, laser owners should carry out periodic calibration and maintenance of their equipment.

Reliable calibration – reliable performance
- Have all your rotating, grade, pipe, line and point lasers professionally checked, calibrated and certified at your local Leica Geosystems distribution partner
- Avoid costly mistakes by having your lasers periodically checked and calibrated
- Work with peace of mind knowing that your lasers are calibrated to the highest accuracy standards
- As the industry's only calibration system issuing ISO certifications, you can trust that your Leica Geosystems rotating laser will perform with complete accuracy

PROTECT by Leica Geosystems
Lifetime Manufacturer's Warranty:

Our lifetime warranty guarantees the quality and reliability of our products. However, should a device fail because of defects in material or workmanship, we will repair or replace it free of charge.

No Cost Period:

Leica Geosystems' products fulfil the highest quality requirements to support you efficiently in your everyday work on site. Should your product become defective, we will repair or replace it at no charge, simply and straightforwardly.

In the event of a repair being necessary, you benefit from the following services:
- Repair or replacement of all defective parts
- Calibration and check of settings
- Comprehensive functional test and safety check
- Servicing and cleaning of the device

PROTECT is subject to Leica Geosystems International Limited Warranty and PROTECT General Terms & Conditions set out under www.leica-geo-systems.com/protect.

Contents

Laser Distance Meters

Quick and efficient

Measure distances and tilts at the touch of a button, in just a few seconds. Saving you time and money.

Precise and reliable

Measure distances to millimetre accuracy. Laser technology makes it possible.

Versatile and functional

The perfect solution for every measuring situation. With more flexibility for you.

Safe and modern

Avoid dangerous measuring situations at work. Use today's modern technology.

06–12 Leica DISTO™ Family

13–15 Leica 3D Disto

Leica DISTO™ Family
The right one for each job

Leica DISTO™ D1
Handy, simple, precise!

At the touch of a button the Leica DISTO™ D1 measures heights, distances as well as niches quickly and reliably. Complicated or dangerous measurement situations, where ladders may be necessary, are now in the past. The functionality of the DISTO™ D1 can be extended with the Leica DISTO™ Plan app.

Article no. 843418

Leica DISTO™ D110
Small size, big possibilities

The Leica DISTO™ D110 is the first laser distance meter with Bluetooth® Smart that fits to a pocket. Its handy design with a pocket clip and simple functions make it a perfect tool for anyone that wants to take effortless measurements.

Article no. 808088

Leica DISTO™ D2
The compact model with 100 m range

Due to the latest measurement technology the Leica DISTO™ D2 achieves a range of 100 m. With Bluetooth® Smart the measurements can be transferred immediately to smartphones or tablets. Sensors in the flip-out end-piece enable the automatic detection of the end-piece position.

Article no. 837031

Leica DISTO™ X3
Designed for tough, rugged conditions

The Leica DISTO™ X3 combines innovative distance measurement technology with a site-proof design. It withstands drop tests from up to 2 meter and is dust tight and jet water protected to IP65 standards. In combination with the Leica DST 360 adapter it allows for Point-to-Point measurements and all measured data is easily documented and visualised with the Leica DISTO™ Plan app.

Article no. 850833

Leica DISTO™ X4
Designed for bright, outdoor environments

In addition to all features of the Leica DISTO™ X3, the DISTO™ X4 is equipped with a Pointfinder camera, allowing for easy targeting of distant objects in bright sunlight. The laser dot may not be visible but the target object displays clearly on the high-resolution colour display.

Article no. 855107

Leica DST 360
Make your X-series into a P2P tool

The DST 360, made entirely out of metal, is a great addition for the Leica DISTO™ X3 and X4. It will transform the handheld tool into a real station allowing to measure distances between any 2 points. In combination with the Leica DISTO™ Plan app you can draw scaled plans which can be used in CAD tools.

Article no. 864982
Article no. 848783 package incl. TRI 120 tripod in rugged case

Leica DISTO™ D510
Great outdoor functionality and apps

The DISTO™ D510 stands for easy and effortless outdoor distance measurement. The unique combination of digital Pointfinder and 360° tilt sensor allows measurements which are not possible with conventional distance meters.
In addition, with Bluetooth® Smart and attractive apps, you are prepared for the future.

Article no. 792290

Leica DISTO™ D810 touch
The smartest solution to measure and document

The Leica DISTO™ D810 touch is the world's first laser distance meter with a touch screen and revolutionary "measure with a picture" feature. The integrated camera can be used to take pictures and download them to a computer. The high level of functionality is perfectly completed by the smart app Leica DISTO™ Plan.

Article no. 792297
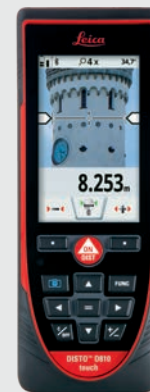
Leica DISTO™ S910
Measure anything from anywhere

The Leica DISTO™ S910 is worldwide the first laser distance meter with the revolutionary P2P Technology. Measure fast and easily distances between any two points from one location. The measurement results can be transferred instantly to PC's via WLAN or Bluetooth® Smart. Alternatively the results can be saved on the device as DXF data and downloaded later with the USB interface for use in CAD software. This shortens the workflow and saves valuable time.

Article no. 805080

Technical Data	DISTO™ D1	DISTO™ D110	DISTO™ D2	DISTO™ X3	DISTO™ X4	DISTO™ D510	DISTO™ D810 touch	DISTO™ S910
Typical accuracy	±2.0 mm	±1.5 mm	±1.5 mm	±1.0 mm	±1.0 mm	±1.0 mm	±1.0 mm	±1.0 mm
Range	0.2 - 40 m	0.2 – 60 m	0.05 – 100 m	0.05 - 150 m	0.05 - 150 m	0.05 – 200 m	0.05 – 250 m	0.05 – 300 m
Measuring units	m, ft, in	m, ft, in	m, ft, in	m, ft, in	m, ft, in	m, ft, in,	m, ft, in	m, ft, in
Tilt sensor				360°	360°	360°	360°	360°
Colour display with Pointfinder					4x zoom	4x zoom	4x zoom, Overview camera	4x zoom, Overview camera
Data interface*	Bluetooth® Smart	Bluetooth® Smart	Bluetooth® Smart	Bluetooth® Smart	Bluetooth® Smart	Bluetooth® Smart	Bluetooth® Smart	Bluetooth® Smart, WLAN
Batteries	Type AAA 2 x 1.5 V	Type AAA 2 x 1.5 V	Type AAA 2 x 1.5 V	Type AA 2 x 1.5 V	Type AA 2 x 1.5 V	Type AA 2 x 1.5 V	Li-ion battery	Li-ion battery
Dimensions	115 x 43.5 x 23.5 mm	120 x 37 x 23 mm	116 x 44 x 26 mm	132 x 56 x 29 mm	132 x 56 x 29 mm	143 x 58 x 29 mm	164 x 61 x 31 mm	164 x 61 x 32 mm
Weight with batteries	87 g	92 g	100 g	184 g	188 g	198 g	238 g	290 g
Memory			10 results	20 results	20 results	30 displays	30 displays	50 displays
Multifunctional end-piece			Automatic recognition	Automatic recognition	Automatic recognition	Automatic recognition	Automatic recognition	Smartbase
Laser class	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2
Protection class	IP54	IP54	IP54	IP65	IP65	IP65	IP54	IP54
Warranty	2 years warranty 3 years warranty after registration on www.disto.com							

* System requirements and other details can be found at www.disto.com

Leica DISTO™ Family
Professional packages for each application

Leica DISTO™ X3 P2P-Package for indoors

Leica DISTO™ X4 P2P-Package for outdoors

The Leica DISTO™ X-Series comes with the DST 360 adapter and the compact but sturdy tripod TRI 120. Everything is stored in a very robust case protected to IP67 standards. The DISTO™ X3 P2P-package allows for Point-to-Point measurements. The DISTO™ X4 P2P-package is especially designed for outdoor Point-to-Point measurements, due to the digital Pointfinder camera of the DISTO™ X4.

Article no. 887687 (Leica DISTO™ X3 P2P-Package for indoors)
Article no. 887891 (Leica DISTO™ X4 P2P-Package for outdoors)

Leica DISTO™ S910 P2P-Package – the ultimate solution

This package is the complete ultimate solution for Point-to-Point measurements and creating drawings, which can be further processed in your preferred software. It includes the DISTO™ S910, the Leica FTA 360-S adapter, the Leica TRI 120 tripod, the Leica GZM3 target plate and the USB charger. Everything is stored in a very robust case protected to IP67 standards.

Article no. 887900

Leica DISTO™ D510 case – Convenient aiming, precise and easy outdoor measuring

This package is the perfect outdoor combination for convenient aiming and precise measurements, even in bright sunshine. The clear arrangement of the Leica DISTO™ D510, Leica FTA360 tripod adapter and Leica TRI 70 tripod in a robust case means you always have everything safe and at hand.

Article no. 823199

Leica DISTO™ D810 touch case – Convenient aiming, precise measuring and easy documentation

This package consists of the Leica DISTO™ D810 touch, the Leica FTA360 adapter and the tripod TRI 70. In combination with the FTA360 adapter, the Leica DISTO™ D810 touch becomes a highly precise measuring station. Everything comes together in an attractive and robust carrying case.

Article no. 806648

Leica DISTO™ Family
Accessories supplied with / optional

1 TRI 70 Tripod

The small portable tripod is intended for everyday use. Its features include easy fine adjustment and a bubble level. Extendible length from 0.40 m to 1.15 m. Ideal with the FTA360 or FTA360-S adapter.

Article no. 794963

2 TRI 100 Tripod

Quality tripod with bubble level, very easy fine adjustment. Extendable length from 0.70 m to 1.74 m.

Article no. 757938

3 TRI 120 Tripod

Twist locks for the legs are making this tripod even more stable. The 180° foldable legs are making it ultimately compact. Ideal for any tripod adapter for all Leica DISTO™ models. Extendable length from 0.40 m to 1.20 m.

Article no. 848788

4 TRI 200 Tripod

Stable construction tripod with 1/4" screw to use with DISTO™ on a FTA360 or FTA360-S adapter or Lino. Extendable length from 0.75 m to 1.15 m.

Article no. 828426

5 FTA360 and FTA360-S Adapter

Sturdy adapter with fine drive for convenient and precise targeting. The adapter eases the task of targeting, above all over long distances, and result in minimum discrepancies when taking indirect measurements. For use in combination with Leica TRI 70, TRI 100, TRI 120 and TRI 200 tripods.

Article no. 828414 for Leica DISTO™ S910
Article no. 799301 for Leica DISTO™ D510 and D810 touch

6 LSA360-S Adapter

Adapter to have the laser beam aligned to the tilting axis when measuring angles and moving the Leica DISTO™ vertically. Works in conjunction with the Leica DISTO™ D810 touch or Leica DISTO™ S910 and set up poles with diameters between 11-35mm.

Article no. 838704

7 GZM3 Target Plate

The new target plate is the perfect accessory for measuring templates, worktops etc. – wherever shapes have to be captured. Edges, curves, markings and corners can be measured in any position.

Article no. 820943

8 GZM26 Target Plate, large

Grey side for short and brown side for long distance measurements.
Size: 210 x 297 mm (A4).

Article no. 723385

9 GZM27 Stick-On Target Plate

Target plate held in place with kneading adhesive.
Size: 45 x 100 mm.

Article no. 723774

10 GZM30 Target Plate

Stick-on target plates for placing on ground markers.
Size: 274 x 197 mm.

Article no. 766560

11 TPD 100 Kit

The target plate for improved targeting with digital Pointfinder on long distances. The kit with pole and bubble enables measurement on landmarks and performance of basic surveying tasks with a Leica DISTO™.

Article no. 5012352

12 POWERLINE 4 LIGHT Charger

For charging 4 rechargeable batteries; type AA or AAA; with 4 adapters for worldwide use; including 4 rechargeable batteries AA / 2500 mAh.

Article no. 806679

13 UC20 Universal Quick Charger

For charging 2 rechargeable batteries; type AAA; with 4 adapters for worldwide use; Including 2 rechargeable batteries type Micro AAA NiMH / 800 mAh.

Article no. 788956

14 GLB30 Super Light Laser Visibility Glasses 3 in 1

With three different lenses: laser visibility glasses, safety glasses and sun glasses. Red lens glasses for improved visibility of the laser dot in bright rooms and outdoors up to 10–15 m.

Article no. 780117

Leica DISTO™ Plan
Measuring requires documentation

The Leica DISTO™ Plan app assists you with the vital task of documenting and visualising your measurements. This way you can easily plan the next steps of your project.

Sketch Plan – create a scale drawing
Simply use your fingers to create a sketch on your smartphone or tablet. Then take corresponding measurements and assign them to the relevant lines of your sketch. The app's 'auto-scale' function automatically adjusts the lines' length and the result is a scaled drawing, showing surface area and circumference. It is that easy to produce a CAD ready floorplan.

Smart Room – plan while you are measuring
A newly integrated sensor in the Leica DISTO™ X3 and X4 makes it possible to create accurate floor plans simply by taking clockwise or counter-clockwise measurements of a room. Once all measurements are taken, the app automatically generates the plan. Keeping records of each measurement and the angle between any two of those measurements at the same time makes it possible.

Measure Plan – create as-build plans for CAD
The Leica DISTO™ app supports P2P technology which makes it possible to create detailed floor or wall plans, including doors and windows. Once complete, simply export your plans as a dxf or dwg file into your preferred CAD solution.

Sketch on Photo – dimension objects in pictures
Leica DISTO™ Bluetooth® Smart technology allows you to assign distance measurements to the appropriate part of a picture taken with your tablet or smartphone. This way you can document all your measurement results and easily process them later in the office.

Leica 3D Disto
Recreating the real world

The high-precision Leica 3D Disto is used whenever the use of conventional measuring tools is only possible with a great deal of time and effort. With the various measurement functions you can record all spatial situations precisely and use the data afterwards in your customary software environment. With the realistic data you can produce the final parts directly. The time-consuming template and modification work during installation is no longer necessary. The fully digitalised workflow saves valuable time.

Leica 3D Disto
Versatility meets efficiency

Leica 3D Disto with 3D Disto software for Windows®
Leica 3D Disto with a licence for the Leica 3D Disto software for Windows®. The intelligent software on a Windows® device controls the Leica 3D Disto, automatically carries out all complicated calculations in the background and only supplies all the relevant information.
Article no. 844692

3D Disto Software for Windows®

Licence for Leica 3D Disto software for Windows®
Windows License for Leica 3D Disto software for operation systems Microsoft Windows 7 or higher. Single license, valid for one Leica 3D Disto.
Article no. 784472

3D Disto Software for Windows®

Customer Care
PACKAGES »

Customer Care Package for 3D Disto
Benefit from online access to a network of support professionals who will work with you to solve any problems that may arise. Additionally get the latest software improvements and new features to keep your products up-to-date.

Article no. 6013493 (for one year)
Article no. 6013494 (for two years)
Article no. 6013495 (for three years)

	Leica 3D Disto with 3D Disto software for Windows®
Leica 3D Disto	✔
License for 3D Disto Software for Windows®	✔
Remote control RM100	✔
Power supply for 3D Disto	✔
4 country-specific power cords for worldwide use	✔
USB memory stick	✔
Self-adhesive target points	✔
Ruler (for measuring hidden points)	✔
Leica GZM3 target plate	✔
USB cable	1
Quickstart	✔

Technical specifications	
Distance in m Tie distance accuracy in mm	10, 30, 50 m 1, 2, 4 mm
Range	0.5 to 50 m / 1.7 to 165 ft
Distance in m Ø of the laser dot in mm	10 m: ~7 mm x 7 mm 30 m: ~9 mm x 15 mm
Angle measuring range horizontal vertical	360° 250°
Self-levelling range tilt sensor	±3°
Digital pointfinder	1x, 2x, 4x, 8x zoom
File format	Import: DXF, CSV Export: DWG, DXF, TXT, CSV, JPG
Data interface	USB cable connection WLAN
Operating time	8 h
Batteries	Li-ion rechargeable
Charging time	7 h
Protection class	IP54
Dimensions Ø x H	186.6 x 215.5 mm
Weight	2.8 kg
Range of remote control (IR)	30 m

System requirements for a Windows® device (not included in the scope of delivery)	
Operating system	Windows 7 or higher
Recommended screen resolution	Minimum 1000 x 680 pixels, desktop or touchscreen
Further recommendations	Use of a pen for the touchscreen, replacement batteries, robust housing

Following tablet computers are tested and recommended by Leica Geosystems AG	
Microsoft Surface Pro 3 - i5	128 GB, WiFi, 12", Windows 10 Pro
Leica CC 80 (iCON)	7", Windows 8.1 Pro

Line & Point Lasers

Set-up, switch on and start working.

Leica Lino lasers project lines or points to millimetre accuracy, making it easier for you to get the job done right.

All Leica Lino lasers are self-levelling, so you can set-up, switch on and start working. Top quality optics and proven accuracy ensure that the projected lines give you a reference line that you can trust. Lino lasers are so simple to understand and operate, providing you with the flexibility to complete any interior application that require you to level, align, plumb or square.

18–23 Leica Lino Family

Leica Lino Family
## Excel on every point across the whole range

Leica Lino L2
You can rely on its sharp lines

The handy cross line laser with outstanding laser line visibility up to 25 meters. Its exceptionally long horizontal and vertical laser lines are projected to floors, walls and ceilings at more than 180 degrees. Smart magnetic adapters allow for quick and precise positioning.

Article no. 848435
Article no. 864413 set incl. Li-ion battery in carrying case
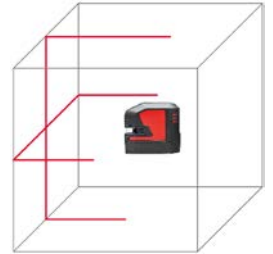
Leica Lino L2G
Visibility on a new level

The green cross line laser with up to 4-times higher visibility. The Li-ion battery ensures continuous working. The Lino can easily be connected to precision engineered adapters via strong magnets, allowing to work faster and more precisely.

Article no. 912932
Article no. 864420 set incl. Li-ion battery and UAL 130 adapter in carrying case
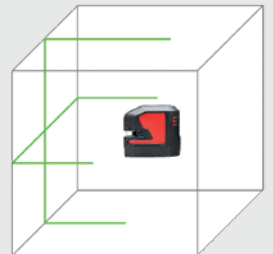
Leica Lino P5
Right to the point!

The 5 point laser for quick setting-out and layout jobs and for easy upward and downward vertical aligning. Magnetic smart adapters allow to quickly attach the Leica Lino P5 to edges, profiles, iron pipes, tracks or bars.

Article no. 864427 set in carrying case

Leica Lino L2P5
Combining points and lines

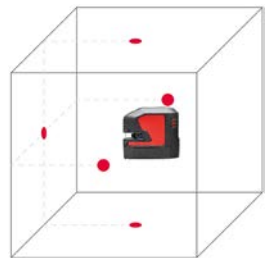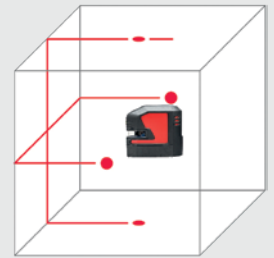The small and handy all-rounder for quick setting-out, layout and alignment jobs. It comes with a smart magnetic adapter which allow to position the instrument quickly and with absolute precision. Due to the Li-ion batteries it runs for up to 44 hours on one charge

Article no. 864431 set incl. Li-ion battery in carrying case

Leica Lino L2P5G
Multi-functionality with highest visibility

The point and cross-line laser with the best green laser technology. Its green laser beams and points are up to four times more visible to the human eye. Li-ion batteries allow this all-round laser tool to run up to 28 hours on just one charge. With the smart magnetic adapters it can be set up over edges and profiles, attached to iron pipes or to various tracks and bars.

Article no. 864435 set incl. Li-ion battery and UAL 130 adapter in carrying case
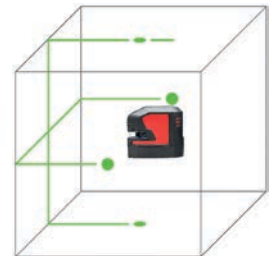
Leica Lino L4P1

Multi line laser to cover a wide range of applications. It can be turned by 360° on a base plate with fine adjustment thus facilitating simple and easy marking of 90° layouts. It is easy to exchange the Li-ion batteries with 24 hours of operation with normal alkaline batteries. Target plate red, Li-ion battery pack, international charger with 4 plugs, Alkaline battery tray, hard case.

Article no. 834838 set incl. Li-ion battery in carrying case
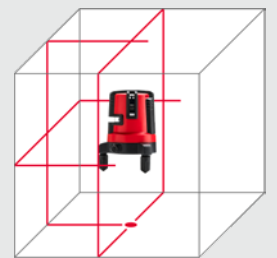
Leica Lino L6R

360° laser line projection for multi-directional alignment - perfect for indoor applications. The laser's vertical lines are easily adjusted once the plumb point, which is located outside the device, is set. This unique feature allows the plumb point (cross-section of two vertical lines) to stay in position while the two vertical lines rotate around it by ±10°.

Article no. 918976
Article no. 912969 set incl. Li-ion battery and UAL 130 adapter in carrying case
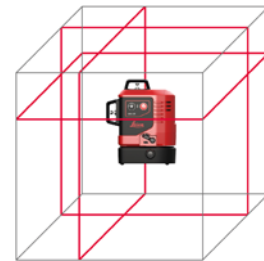
Leica Lino L6G

360° green laser lines ensure highest visibility of up to 70 metres in diameter; making this the perfect tool for multi-directional alignment, plumbing, levelling and squaring tasks in large and bright environments.

Article no. 918977
Article no. 912971 set incl. Li-ion battery and UAL 130 adapter in carrying case
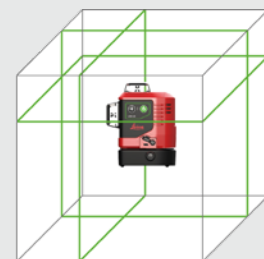
Leica Lino ML180

With the Smart Targeting function it is possible to produce layout drawings very efficiently without help from another person, even involving long distances. The laser line is aligned with the XCR Catch receiver by just pressing a key. When producing layouts of up to 100 m, accuracy is extremely important in order to prevent expensive errors. This is where the precision of the electronic self-levelling system provides a real advantage.

Article no. 784438
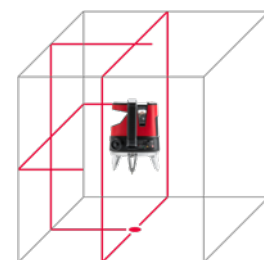
Technical Data	Lino L2s	Lino L2	Lino L2Gs	Lino L2G	Lino P5	Lino L2P5	Lino L2P5G	Lino L4P1	Lino L6Rs	Lino L6R	Lino L6Gs	Lino L6G	Lino ML 180
Range*	25 m	25 m	35 m	35 m	30 m	25 m	35 m	15 m	25 m	25 m	35 m	35 m	20 m
Smart Targeting	-												yes
Levelling accuracy	±0.2 mm/m												±0.07 mm/m
Self-levelling range	±4°							±3°	±4°				±5°
Dot accuracy	-					±0.2 mm/m			-				±0.1 mm/m
Horizontal line accuracy	±0.3 mm/m				-	±0.3 mm/m		±0.2 mm/m	±0.3 mm/m				±0.1 mm/m
Vertical line accuracy	±0.3 mm/m				-	±0.3 mm/m		±0.2 mm/m	±0.3 mm/m				±0.1 mm/m
Beam direction	vertical, horizontal				up, down, forward, right, left	vertical, horizontal, up, down, right, left		3 vertical, 1 horizontal, 1 plumb down	1 x 360° vertical front, 1 x 360° vertical side, 1 x 360° horizontal				vertical forward + right + left, horizontal, plumb down
Laser type	635 nm / Class 2		525 nm / Class 2		635 nm / Class 2		525 nm / Class 2	635 nm / Class 2			525 nm / Class 2		635 nm / Class 2
Protection class	IP54												
Battery type	AA 3 x 1.5 V	Li-ion rechargeable (or AA 3 x 1.5 V)	AA 3 x 1.5 V	Li-ion rechargeable (or AA 3 x 1.5 V)	AA 3 x 1.5 V	Li-ion rechargeable (or AA 3 x 1.5 V)	Li-ion rechargeable (or AA 3 x 1.5 V)	Li-ion rechargeable (or AA 4 x 1.5 V)	AA 3 x 1.5 V	Li-ion rechargeable (or AA 3 x 1.5 V)	Li-ion rechargeable (or AA 3 x 1.5 V)	Li-ion rechargeable (or AA 3 x 1.5 V)	NiMH rechargeable (or D 2 x 1.5 V)
Operating time**	up to 13 h (AA)	up to 44 h (Li-ion)	up to 7 h (AA)	up to 28 h (Li-ion)	up to 37 h (AA)	up to 44 h (Li-ion)	up to 28 h (Li-ion)	up to 24 h (Li-ion)	up to 25 h (AA)	up to 36 h (AA)	up to 11 h (AA)	up to 11 h (AA)	up to 12 h (NiMH)
Weight with batteries	500 g	530 g	500 g	530 g	495 g	530 g	530 g	1173 g	751 g	781 g	781 g	781 g	2200 g
Warranty	2 years warranty 3 years warranty after registration on www.disto.com												

* depending on lighting conditions

** depending on laser mode

Leica Lino Family
Accessories supplied with / optional

1 **Receiver RVL 80**

For detecting red line laser beams over longer distances or in difficult light conditions. Localizes the laser beam at a distance of up to 80 m. Optical and acoustic signals help to find the laser plane. Compatible with Lino L2, L2P5, L6R and L4P1.

Article no. 838757

2 **RGR 200 Receiver**

One laser receiver for all! Robust IP65 housing with front and back side display, incl. magnets for ceiling attachment. Locating red and green laser beams at distances up to 80 m. For Leica Lino L2, L2G, L2P5, L2P5G, L6R, L6G and L4P1.

Article no. 866090

3 **XCR Catch Receiver**

Smart Targeting receiver enables automatic aligning of the vertical laser beam from the Leica Lino ML180. It includes a laser receiver and a remote control for automatic layouting tasks up to 50 m. The clamp can be attached quickly by magnets. Automatic alignment just compatible with Lino ML180.

Article no. 842018

4 **UAL 130 Wall Mount**

The universal adapter for Lino allows to attach and adjust the height of the Leica Lino by 130 mm easily and precisely. Can be used for the new Leica Lino L2, L2G, L2P5, L2P5G, L6R, L6G and P5.

Article no. 866131

5 **Wall Bracket**

Wall and ceiling adapter with 1/4" screw, of universal application thanks to screw fastening. Compatible with L4P1.

Article no. 758839

Leica Lino Family

Accessories supplied with / optional

6 **CLR290 Clamp Rod**

For stepless positioning of lasers at different heights up to 2.90 m. With mounting platform. For all Linos.

Article no. 761762

7 **TRI 70 Tripod**

The small portable tripod is intended for everyday use. Its features include easy fine adjustment and a bubble level. Extendable length from 0.40 m to 1.15 m.

Article no. 794963

8 **TRI 100 Tripod**

Quality tripod with bubble level, tilting platform, and very easy fine adjustment. Extendable length from 0.70 m to 1.74 m. Compatible with DISTO™ and Lino.

Article no. 757938

9 **GLB 10R / GLB 10G Laser Glasses**

Red and green laser glasses for improved visibility of laser lines and dots in bright rooms and out-doors up to 15 m.

Article no. 834 534 (for red lasers)
Article no. 772 796 (for green lasers)

10 **Li-ion Battery Pack**

The long life Li-ion batteries allow you to work uninterrupted for up to 44 hours. The batteries are re-chargeable and more cost efficient than standard Alkaline batteries.

Article no. 842427 for L2, L2G, P5, L2P5, L2P5G
Article no. 835711 for L4P1
Article no. 913012 for L6R and L6G

11 **Drop protector for Lino devices**

Lanyard that can be fixed at the Lino to prevent it from dropping down.

Article no. 921250

X+ 15.00
Y+ 3.000

Construction Lasers

Whether it's general construction, pipe laying or interior walls and ceilings, our lasers are built to handle any environment.

All construction lasers are of high technology and high precision tools. Compare these features and you'll see why our construction lasers set the standard for durability and value. Leica Geosystems lasers are waterproof, that means all critical components are completely protected from wet weather conditions.

With the new Leica Rugby CLA / CLH / CLI Upgradable Lasers you can get your device upgraded to match your application needs. The maximum flexibility and the ability to quickly adjust to the job's needs is vital for your projects.

Leica Rugby CLA / CLH / CLI
The first upgradable lasers

Rugby CLH

Basic Instrument including battery, charger and carry case

Article	Description
6012274	Rugby CLH Basic

Rugby CLH packages including battery, charger and carrying case

Article	Description
6012276	Rugby CLH & CLX200, manual grade
6012277	Rugby CLH & CLX300, semi auto single grade
6012278	Rugby CLH & CLX400, semi auto dual grade

Combo required for all packages

Rugby CLA

Basic Instrument including battery, charger and carrying case

Article   Description
6012279   Rugby CLA Basic

Rugby CLA packages including battery, charger and carrying case

Article   Description
6012281   Rugby CLA & CLX250, manual grade
6012282   Rugby CLA & CLX500, manual grade, lay down
6012283   Rugby CLA & CLX600, auto single grade, lay down
6012284   Rugby CLA & CLX700, auto dual grade, lay down
6012280   Rugby CLA & CLX800, auto dual grade, 20 RPS
Combo required for all packages

Rugby CLI

Basic Instrument including battery, charger and carrying case

Article	Description
6012285	Rugby CLI Basic

Rugby CLI packages including battery, charger and carrying case

Article	Description
6012286	Rugby CLI & CLX900 auto dual grade, 20 RPS invisible beam

Combo required for all packages

LEICA RUGBY	CLH	CLA	CLI
Warranty	5Y / 2Y knockdown	5Y / 2Y knockdown	5Y / 2Y knockdown
Grade capability* (X/Y Axes)	8%	15%	15%
Self-levelling accuracy**	±1.5 mm at 30 m (±1/16" at 100 ft)	±1.5 mm at 30 m (±1/16" at 100 ft)	±1.5 mm at 30 m (±1/16" at 100 ft)
Self-levelling range	±6°	±6°	±6°
Operating range with Combo, RE 140/160	1,350 m diameter	1,350 m diameter	1,350 m diameter
Remote range	600 m diameter	600 m diameter	600 m diameter
Laser class	1	2	1
Environmental standard	IP68 / MIL-STD-810G	IP68 / MIL-STD-810G	IP68 / MIL-STD-810G
Operating temperature	-20 °C to +50 °C -4 °F to +122 °F	-20 °C to +50 °C -4 °F to +122 °F	-20 °C to +50 °C -4 °F to +122 °F
Storage temperature	-40 °C to +70 °C -40 °F to +158 °F	-40 °C to +70 °C -40 °F to +158 °F	-40 °C to +70 °C -40 °F to +158 °F
Rotation speed	10, 15, 20 RPS	0, 2, 5, 10, 15, 20 RPS	10, 15, 20 RPS
Batteries (Li-ion)	Li-ion	Li-ion	Li-ion
Battery operating time**	50 h	50 h	50 h
Battery charging	5 h (full charge) 1 h fast charge = 8 h operating	5 h (full charge) 1 h fast charge = 8 h operating	5 h (full charge) 1 h fast charge = 8 h operating
Dimensions (H x W x D)	230 mm / 9,1 in 296 mm / 11,7 in 212 mm / 8,3 in	230 mm / 9,1 in 296 mm / 11,7 in 212 mm / 8,3 in	230 mm / 9,1 in 296 mm / 11,7 in 212 mm / 8,3 in
Weight with batteries	3.8 kg / 8,3 lbs	3.9 kg / 8,5 lbs	3.9 kg / 8,5 lbs

* Up to 45° with adapter. ** Accuracy defined at 25 °C (77 °F) battery life depending upon environmental conditions.
All specifications are depending on activated functionality.

Leica Combo Receiver / Remote

Combo including Bracket (receiver & remote for Rugby CLA, CLH, CLI)

Article	Description
864848	Combo receiver & remote

LEICA COMBO (RECEIVER/REMOTE)	
Warranty	3Y
Anti-Strobe	✔
Working range - Receiver	1,350 m / 4,430 ft (diameter)
Working range - Remote	600 m / 1,969 ft (diameter)
Detection window	120 mm / 4.7 in
Digital read out	✔
Offset	✔
Variable detection window length	✔
Audio volumes	4 (including mute)
Detection bandwidth	0.5, 1, 2, 5 mm
Environmental standard	IP67
Batteries (Li-ion) / Battery operating time**	Li-ion 3.7 V / 50 h
Battery charging	5 h (full charge) 1 h (fast charge - 8 h operating)
Rechargeable battery / charging option with power bank (USB-C)	✔
Operating temperature	-20 °C to +50 °C, -4 °F to +122 °F
Dimensions (H x W x D)	205 mm x 86 mm x 32 mm (8.1 in x 3.4 in x 1.2 in)
Weight with batteries	0.4 kg / 0.9 lbs

** Defined at 25°C (77°F) battery life depending upon environmental conditions.
All specifications are depending on activated functionality on the laser.

Battery and charging

1 A800 Li-ion Battery Pack

12 V / 7.2 Ah (for Rugby CLH / CLA / CLI)
Article no. 864849

2 A100 Li-ion Charger

(for Rugby CLH, CLA, CLI & 600 series, Combo)
Article no. 790417

3 USB Charger

(for Combo)
Article no. 864852

4 USB Cable C-C

(for Laser and Combo)
Article no. 864854

5 USB Cable C-A

(for Laser and Combo)
Article no. 864853

6 A130 12 V Battery Cable

4.5 m, charge and run from auto battery
Article no. 790418

7 A140 Car Adapter Cable

1 m Charge inside the vehicle while driving.
No downtime, unique power concept with
solar panel.

Article no. 797750

Leica Rugby 600 Series
Your reliable partner on site

Leica Rugby 610
One button simplicity

Leica Rugby 610 – A one-button, self-levelling horizontal laser (single axis, manual slope when used with the A240 Manual Slope Adapter).

Rugby 610 Package with Rod Eye 120 Receiver
Rugby 610 with carrying case, Rod Eye 120 receiver, charger and rechargeable Lithium-Ion batteries.

Article no. 6011149
Additional packages available.

Leica Rugby 620
Simple and reliable

Leica Rugby 620 – An accurate, easy-to-use, self-levelling horizontal laser with manual grade control.

Rugby 620 Package with Rod Eye 120 Basic Receiver
Rugby 620 with carrying case, Rod Eye 120 receiver, charger and rechargeable Lithium-Ion batteries.

Article no. 6011151
Additional packages available.

Leica Rugby 640 / 640G
Versatile inside and out

The Rugby 640 / 640G – A multi-purpose, self-levelling horizontal/vertical laser for interior and general construction applications. Red or green beam can be chosen

Rugby 640 Package with Rod Eye 120 Basic Receiver and RC400 Remote
Rugby 640 with carrying case, Rod Eye 120 receiver, RC400 remote, charger and rechargeable Lithium-Ion batteries.

Article no. 6011481
Additional packages available.

Rugby 640G Package with Rod Eye 120G Receiver and RC400 Remote
Rugby 640G with carrying case, Rod Eye 120G receiver, RC400 remote, charger and rechargeable Lithium-Ion batteries.

Article no. 6011487
Additional packages available.

● Best visibility
Green Laser

Leica Rugby 680
Semi-automatic, dual grade laser

The Rugby 680 is a semi-automatic, dual slope laser designed for the contractor that does mostly flat work, but occasionally needs to create a slope in two axes such as a small parking area.

Rugby 680 Package with Rod Eye 120 Basic Receiver
Rugby 680 with carrying case, Rod Eye 120 receiver and rechargeable Lithium-Ion batteries.
Article no. 6011159
Additional packages available.

Technical Data	Rugby 610	Rugby 620	Rugby 640	Rugby 640G	Rugby 680
Functionality	Self-levelling horizontal, one button laser	Self-levelling horizontal, with dual axis manual slope	Self-levelling horizontal, vertical, 90° with dual axis manual slope	Self-levelling, horizontal, vertical, 90° and manual slope in dual axis	Semi-automatic, self-levelling horizontal with dial-in, dual axis
Range (diameter) with RE120 / 120G	800 m	800 m	500 m	400 m	900 m
Range (diameter) with RE140 / 160	1,100 m	1,100 m	600 m	-	1,100 m
Self-levelling accuracy	±2.2 mm at 30 m	±2.2 mm at 30 m	±2.2 mm at 30 m	±2.2 mm at 30 m	±2.2 mm at 30 m
Self-levelling range			±5°		
H.I. elevation alert	✔	✔	✔	✔	✔
Rotation speeds	10 rps	10 rps	0, 2, 5, 10 rps	0, 2, 5, 10 rps	10 rps
Scanning modes			10°, 45°, 90°	10°, 45°, 90°	
Remote control / radius			RC400 / 200 m	RC400 / 200 m	
Laser diode type / class	635 nm / Class 1	635 nm / Class 1	635 nm / Class 2	520 nm / Class 2	635 nm / Class 1
Dimensions (H x W x D)			212 x 239 x 192 mm		
Weight with battery	2.4 kg	2.6 kg	2.6 kg	2.6 kg	2.6 kg
Batteries (rechargeable)			Li-ion pack (A600)		
Battery life (rechargeable)			40 h @ 20 °C		
Environmental standard			IP67		
Operating temperature range	−20 °C to +50 °C	−20 °C to +50 °C	−20 °C to +50 °C	−20 °C to +50 °C	−20 °C to +50 °C
PROTECT service offering			Manufacturer's Warranty: Lifetime No Cost period: 3 years		

Battery and Charging

1 A100 Li-ion Charger

(for Rugby CLH, CLA, CLI & 600 series, Combo)
Article no. 790417

2 A600 Li-ion Battery Pack, 4.8 Ah

(for Rugby 600 series)
Article no. 790415

3 A130 12 V Battery Cable, 4.5 m

Charge and run from auto battery for all Rugby lasers.
Article no. 790418

4 A140 Car Adapter Cable, 1 m

Charge inside the vehicle while driving. No downtime, unique power concept with solar panel for all Rugby lasers.
Article no. 797750

Rotating Lasers Accessories

1	Flexi Rod with mm scale
	Article no. 868132

2	CT 160 Tripod with screw clamps
	Article no. 864856

3	CTP104 Tripod with fast clamps
	Article no. 767710

4	Rugby Smart Adapter with 90°RE clamp for all Rugby lasers
	Article no. 864855

5	Combo and Rod Eye Receiver bracket
	Article no. 835666

6	90°RE Clamp (all Rod Eyes and Combo)
	Article no. 864860

7	A270 Facade Adapter Assembly (1x50cm)
	Article no. 795176

8	Rugby Scope with adapter plate for Rugby CLA / CLI
	Article no. 864859

9	Rugby Carrying case Flexible Name Tag
	Article no. 868138

10	Rugby Carrying case Standard Name Tag (without label)
	Article no. 864857

11	RC400 Remote Control
	Operates with Rugby 640 / 640G.
	Article no. 790352

12	A240 Manual Slope Adapter
	Used with Rugby 610.
	Article no. 790434

13	A210 Ceiling Grid Target
	Used with Rugby 640.
	Article no. 732791

14	A210G Green Ceiling Grid Target
	Used with Rugby 640G.
	Article no. 849525

Leica Rugby Receivers
For all Rugby lasers

1 **Rod Eye 120 Basic and Bracket**

Great receiver for all general construction applications. Detection window of 7 cm.

Article no. 789922

2 **Rod Eye 120G and Bracket**

Designed to capture the green laser beam. Detection window of 7 cm.

Article no. 844745

3 **Rod Eye 140 Classic and Bracket**

Standard receiver with arrow display. Detection window 12 cm.

Article no. 789923

4 **Rod Eye 160 Digital and Bracket**

Great receiver with digital readout. Detection window 12 cm.

Article no. 789924

Technical Data	Rod Eye 120G Basic	Rod Eye 120 Basic	Rod Eye 140 Classic	Rod Eye 160 Digital
Working diameter (laser dependent)	400 m	900 m	1,350 m	
Detection window	70 mm		120 mm	
Digital readout	✔			✔
Detectable spectrum	500 nm to 570 nm	600 nm to 800 nm		
Audio volumes	High / Low / Off			High / Med / Low / Off
Detection bandwidth		Fine ±1 mm Medium ±2 mm Coarse ±3 mm		Very fine ±0.5 mm Fine ±1 mm Medium ±2 mm Coarse ±3 mm Very Coarse ±5 mm
LED display	✔	✔	✔	✔
Anti-strobe protection			✔	✔
Environmental standard	IP67			
Battery life (hours)	50+ (2x AA type)			
Dimensions (H x W x D)	173 x 76 x 29 mm			
Operating temperature range	−20 °C to +50 °C			
Warranty	3 years			

Leica Piper 100 / 100 2M / 200
The world's most versatile pipe laser

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 (4 inch) pipe.

Piper 100 Package
Piper 100, remote, target, Li-ion battery. Charger, car adapter cable and carrying case.
Article no. 748704

Piper 100 2M Package
Piper 100 with Laser Class 2M laser, remote, target, Li-ion battery, Charger, car adapter cable and carrying case.
Article no: 853610

Piper 200 Package with Alignmaster
Piper 200, remote, target, Li-ion battery. Charger, car adapter cable and carrying case.
Article no. 748710

Leica Piper Accessories

1	**IR Remote Control**
	Article no. 746157

2	**Target Assembly**
	Article no. 725858

3	**Target Assembly, 100 mm / 4"**
	Article no. 815613

4	**Trivet Assembly**
	Article no. 746158

Technical Data	Piper 100	Piper 100 2M	Piper 200
Laser type	635 mm (red) Laser Class 3R	635 mm (red) Laser Class 2M	635 mm (red) Laser Class 3R
Working range	200 m	200 m	200 m
Laser output	4.75 mW Maximum	1.20 mW Maximum	4.75 mW Maximum
Grade range	-10% to +25%	-10% to +25%	-10% to +25%
Self-levelling range	-15% to +30%	-15% to +30%	-15% to +30%
Line movement	6 m at 30 m	6 m at 30 m	6 m at 30 m
Battery type	Lithium-Ion	Lithium-Ion	Lithium-Ion
Operation / charge*	40 h / 4 h	40 h / 4 h	40 h / 4 h
Operating temperature range	-20 °C to +50 °C	-20 °C to +50 °C	-20 °C to +50 °C
Weight	2 kg	2 kg	2 kg
Protection class (splash water / dustproof)	IPx8	IPx8	IPx8
Construction	Cast Aluminium	Cast Aluminium	Cast Aluminium
Dimensions (Diameter x length)	96 x 267 mm	96 x 267 mm	96 x 267 mm
Wireless remote	Front 150 m, back 10 m	Front 150 m, back 10 m	Front 150 m, back 10 m
Alignmaster (Auto. targeting system)	No	No	Yes

* Dependent upon environmental conditions

Leica MC200 Depthmaster
Depth indication system

The Leica Depthmaster reception area is 200°. The intensity of the LED cluster of indicator lights can be seen even on the brightest of days and indicates the on grade position relative to the plane of laser light. With its patented internal verticality control system, grade control will be more accurate as verticality is a prerequisite for precise measurements.

Depthmaster Excavator Receiver with Magnetic Bracket
Package includes Depthmaster with carrying case, battery pack NiMH for Depthmaster, magnetic bracket, charger and user manual.
Article no. 742440

Depthmaster Excavator Receiver with Clamp-on Brackets
Package includes Depthmaster with carrying case, battery pack NiMH for Depthmaster, clamp-on bracket (2x), charger and user manual.
Article no. 742438

LMR 240
240° machine receiver

The LMR 240 receiver provides accurate grade information for all visual machine control applications, with 240° reception from any rotating laser.

LMR 240
LMR 240 with magnetic mount, carrying case and batteries.
Article no. 773569

LMR 360
360° machine mounted receiver

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

LMR 360R with Clamps and LMD360R Remote
LMR 360 with mounting clamps, carrying case, NiMH batteries, charger and LMD 360R remote.
Article no. 6003352

LMR 360R with Magnets and LMD360R Remote
LMR 360 with magnetic mounts, carrying case, NiMH batteries, charger and LMD 360R remote.
Article no. 6003353

Technical Data	LMR240	LMR360	MC200 Depthmaster
Range	250 m	200 m	200 m
Reception	240°	360°	200°
Capture window	15 cm	25 cm	21 cm
Accuracy (fine)	1.5 – 6 mm	6 mm	±4 mm
Accuracy (coarse)	10 – 15 mm	12 mm	±12 mm
Environmental standard	IP67	IP67	IP67
Battery type	3x AA batteries	NiMH rechargeable	NiCd rechargeable (NiMH Q3/14)
Battery life	120 – 160 h	30 h	> 48 h
Weight	1.9 kg	1.8 kg	2.4 kg
Mounting	Magnetic	Magnetic / Clamps	Magnetic / Clamps
Remote display	–	✔	–
Remote range	–	30 m	–

Optical Levels

Extreme robustness, high measurement precision and an extremely competitive price. All this makes the difference. Moreover, Leica Geosystems levels are so easy-to-use, there is no need to spend time on training.

Leica Geosystems levels can be configured to suit your work and preferences. Horizontal angles can be read in either degrees or gons, with some levels.

42 Leica NA300 Series

43 Leica NA500 Series

44 Leica NA700 Series

45 Leica NA2 / NAK2

Leica NA300 Series
Unique. Accurate. Simple.

The Leica NA300 Series of automatic (optical) levels has been developed for professionals who are looking for the highest quality results day by day. With the many obstructions and uneven surfaces on construction and building sites, the NA300 levels rise to the occasion and ensure the straightest and safest construction possible.

NA320
Automatic level in carry case, with 20x magnification.

Article no. 840381

NA324
Automatic level in carry case, with 24x magnification.

Article no. 840382

NA332
Automatic level in carry case, with 32x magnification.

Article no. 840383

Technical Data	NA320	NA324	NA332
Magnification	20x	24x	32x
Angle measurement	360°		
Standard deviation (per km double-run)	2.5 mm	2.0 mm	1.8 mm
Shortest target distance	‹ 1.0 m		
Dust / Water protection	IP54		
Working temperature	−20 °C to +40 °C		
Weight	1.5 kg		
PROTECT service offering	Manufacturer's Warranty: Lifetime No Cost period: 1 year		

Leica NA300 and NA500 Accessories

1 CTP104 Tripod with fast clamps

Aluminium tripod with shoulder strap and fast clamps, medium weight. Complies with NA Levels

Article no. 767710

3 CLR102 Telescopic Level Staff

5 m length, 4 sections, E-graduation front, mm-graduation back. Complies with NA Levels

Article no. 727588

2 CLR104 Telescopic Level Staff

CLR104 Telescopic Level Staff, 5 m length, 5 Sections, inverse reading

Article no. 743420

4 CT160 Tripod with screw clamps

CT 160 Tripod with screw clamps. Complies with NA Levels

Article no. 864856

Leica NA500 Series

Engineered for professionals by experts

Professionals face many obstructions on site. Whatever the levelling challenge, Leica NA500 Series levels overcome. Rely on the known expertise of Leica Geosystems for the best quality and performance. On your terms, on your site, Leica Geosystems and the Leica NA500 Series are your trusted partners for accurate measurements every time.

NA520

Automatic level in carry case, with 20x magnification.

Article no. 840384

NA524

Automatic level in carry case, with 24x magnification.

Article no. 840385

NA532

Automatic level in carry case, with 32x magnification.

Article no. 840386

Technical Data	NA520	NA524	NA532
Magnification	20x	24x	32x
Angle measurement	360°		
Standard deviation (per km double-run)	2.5 mm	1.9 mm	1.6 mm
Shortest target distance	‹ 1.0 m		
Dust / Water protection	IP56		
Working temperature	−20 °C to +50 °C		
Weight	1.5 kg		
PROTECT service offering	Manufacturer's Warranty: Lifetime No Cost period: 2 years		

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Leica NA700 Series
Built for builders, engineers and surveyors

Nothing stops a Leica NA700 level. A short drop onto the ground, a fall into water, vibration from heavy machinery – with a Leica NA700 level you just carry on working. No time-consuming checking or readjustment required. The 'best-in-class' optics enable you to always work as precisely as possible. What does this add up to? Reduced work downtime, and higher productivity, resulting in reliability and accuracy at an extremely reasonable price.

In every Leica NA700 series level lies over a century of research and development from forefathers Kern Swiss and WILD Heerbrugg. Continuous application of the most modern technology has led to Leica Geosystems of today.

NA720	NA724	NA730 plus
Automatic Level 20x telescopic magnification. The automatic level for all applications on the construction site.	Automatic Level 24x telescopic magnification for improved accuracy. Reliability and robustness for the demanding construction user.	Automatic Level 30x telescopic magnification. The most precise. Meets the highest standards in construction, engineering and topographic surveys.
Article no. 641982	**Article no. 641983**	**Article no. 833190**

Technical Data	NA720	NA724	NA730 plus
Magnification	20x	24x	30x
Angle measurement	360° / 400 gon		
Standard deviation (per km double-run)	2.5 mm	2.0 mm	0.7 mm
Dust / Water protection	IP57		
Working temperature	−20 °C to +50 °C		
Weight	1.6 kg		1.7 kg
PROTECT service offering	Manufacturer's Warranty: Lifetime No Cost period: 2 years		

Accessories

1 CT160 Tripod with screw clamps

CT160 Tripod with screw clamps. Complies with NA Levels

Article no. 864856

2 CLR102 Telescopic Level Staff

5 m length, 4 sections, front side with E-graduation and back side with mm-graduation.

Article no. 727588

Leica NA2 / NAK2
The classical level

The Leica NA2 universal automatic level meets all requirements regarding precision, convenience and reliability. It was designed by surveyors and development engineers with years of experience, that know what a field instrument has to be able to do. The NA2 soon pays for itself, because it can be used for all types of surveying jobs - on building sites for routine levelling, in engineering projects and for geodetic control at all levels of accuracy.

Leica NA2 and Leica NAK2 are two universal automatic levels meet all the requirements of precision levelling.

NA2	NAK2 (400gon)	NAK2 (360 degrees)
Universal automatic level magnification 32x standard deviation per 0.7 mm (double-run levelling, depending on staff and technique).	Magnification: 32x Standard deviation per km 0.7 mm (double-run levelling, depending on staff and technique).	Same as before, but horizontal circle 360 degrees, optical scale interval 10', reading by estimation 1'.
Article no. 352036	**Article no. 352039**	**Article no. 352038**

Technical Data	NA2	NAK2
Magnification	32x FOK73 eyepiece (optional): 40x	standard: 32x FOK73 eyepiece (optional): 40x
Angle measurement	–	360° / 400 gon
Standard deviation (per km double-run)	0.7 mm/km (0.3 mm with parallel-plate micrometer)	
Dust / Water protection	IP53	
Working temperature	−20 °C to +50 °C	
Weight	2.4 kg	
PROTECT service offering	Manufacturer's Warranty: Lifetime No Cost period: 3 years	

Accessories

1 | **GPM3 Parallel-Plate Micrometer**

In container, measuring range 10 mm.
Article no. 356121

2 | **GOA2 Autocollimation Eyepiece**

For all instruments.
Article no. 199899

3 | **FOK73 40x Eyepiece**

For NA2 / NAK2, exchangeable against standard eyepiece.
Article no. 346475

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Digital Levels

Levelling can be so easy with digital levels from Leica Geosystems. Push the button and heights, height differences and distances are automatically displayed. There will be no more misreading and interpretation errors in reading the staff.

It is also possible to use it as an optical level, however compared to a conventional level, the digital levels effortless, fast measurements could save you valuable time and reduce errors. Our digital levels even include additional error reducing functions such as built-in tilt sensors, preventing the system from measuring if the user operates outside the compensator range.

48–49 Leica Sprinter Series

Leica Sprinter 50
One-touch does it all

The Leica Sprinter 50 is the perfect levelling tool for daily tasks and basic work on the construction site. The user just aims, focuses the staff like an optical level, and measures by pressing one single button. The data is displayed almost instantly. Misreadings are eliminated, and error reducing functions, such as the tilt sensor, prevent the system from measuring if the user operates outside the compensator range.

Sprinter 50
Electronic level, standard deviation 2.0 mm, includes container, strap adjustment tools, user manual, leaflet and 4x AA batteries.

Article no. 762628

Leica Sprinter 150/150M/250M
Advanced opportunities

For more complex construction tasks, the Sprinter 150 automatically determines delta height and reduced level. The Sprinter 150M and 250M are the perfect tools for advanced construction levelling tasks. They can store up to 2'000 measurements, and the user can download and transfer these for further calculations to a PC with Excel® easier than ever before via USB. The Sprinter's onboard software, with functionalities such as Line Levelling and Cut & Fill as well as monitoring, facilitates all levelling jobs significantly.

Sprinter 150
Electronic level, standard deviation 1.5mm, includes container, strap, adjustment tools, user manual and 4x AA batteries.

Article no. 762629

Sprinter 150M
Electronic level with internal memory, standard deviation 1.5 mm, includes container, strap, adjustment tools, user manual, 4x AA batteries, USB cable and CD.

Article no. 762630

Sprinter 250M
Electronic level with internal memory, standard deviation 1.0mm, includes container, strap, adjustment tools, user manual, 4x AA batteries, USB cable and CD.

Article no. 762631

Multilingual Function
The Sprinter 150 / 150M / 250M are featured with multiple languages onboard. This allows the user to choose their preferred language.

Multi lingual

Technical Data	Sprinter 50	Sprinter 150 / 150M	Sprinter 250M
Height accuracies	Standard deviation height measurement per 1 km double run (ISO 17123-2)		
– Electronic measurement*	2.0 mm	1.5 mm	1.0 / 0.7* mm
– Optical measurement	With standard aluminium E-scale / Numeral staff: 2.5 mm		
– Single staff reading	Standard deviation: 0.6 mm (electronic) and 1.2 mm (optical) at 30 m		
Distance accuracies	Standard deviation distance measurement 10 mm for D ‹ 10 m and (Distance in m x 0.001) for D › 10 m		
Range	2 – 100 m (electronic)		
Measuring modes		Single and Tracking	
Time for single measurement	‹ 3 sec		
Compensator	Magnet damped pendulum compensator (range ±10 min)		
Telescope	Magnification (optical) 24x		
Data storage		Up to 2,000 points (only 150M)	Up to 2,000 points
Environmental conditions	IP55		
Power supply	AA dry cells (4x LR6 / AA / AM3 1.5 V)		
Weight	‹ 2.5 kg		
PROTECT service offering	Manufacturer's Warranty: Lifetime No Cost period: 2 years		

* 0.7 mm can be achieved with Sprinter fibre glass barcode staff

Leica Sprinter Accessories

1 GSS111 Dual Face Telescopic Levelling Staff

5 m, 4 sections, Sprinter barcode / E-Scale cm-graduation, with circular bubble, in transport bag (Std. version).
Article no. 741882

2 GSS113 Fibreglass Dual Face Staff

Fibreglass dual face staff 3 m, 1 section, Sprinter barcode / E-scale cm graduation, with circular bubble and transport bag.
Article no. 764452

3 CTP104 Tripod with fast clamps

Medium duty aluminium tripod with carrying strap and fast clamps.
Article no. 767710

4 CT160 Tripod with screw clamps

Aluminium tripod with shoulder strap and fast clamps, medium weight.
Article no. 864856

5 Sprinter Barcode staff

US: **741883** Dual face telescopic staff, 5 m 4 sections, feet / 10th

UK: **741884** GSS112-3 Dual-face staff, 4 m, 4 sections

JP: **741885** Dual face telescopic staff, 5 m 4 sections

Total Stations and Layout tool

Still using tapes and strings or optical theodolites and plumb bobs for your construction layout tasks? Do you need a tool that fulfils all measuring tasks on your construction site with ease, regardless of your profession?

Leica Geosystems' iCON portfolio of manual and robotic total stations facilitates your move from conventional analogue to digital layout methods. Decide between manual total stations for 2-person operation or a robotic total station that can be operated by only one person. Equipped with the construction tailored software Leica iCON build, both solutions lead you to achieve the high productivity and accuracies demanded by the building construction industry.

Manual Total Stations

Leica iCON iCB50

Leica Geosystems' new manual construction total station, the Leica iCON iCB50, simplifies your first step from conventional analogue layout methods to modern digital techniques which are needed for modern BIM processes. Easy-to-use and designed specifically for applications in the building construction industry, the iCB50 is usable with minimal training of the existing workforce, making you ready for the no-tapes and no-strings approach to construction layout.

Leica iCON iCB50 & iCON build & CC80 Tablet

Leica iCON 2" iCB50 Manual Total Station & iCON build Field Software & CC80 7" WIN Tablet.

Article no. 6015020

*More packages available. Please contact your responsible sales contact.

All Leica iCON iCB50 kits contain:
- Total Station
- USB stick
- Tribrach
- Tripod
- Charger
- Batteries
- Prism
- Pole
- Pole clamp for controller
- Bi-pod
- Total Station carry case
- Controller with accessories
- Controller carry case
- Field Software
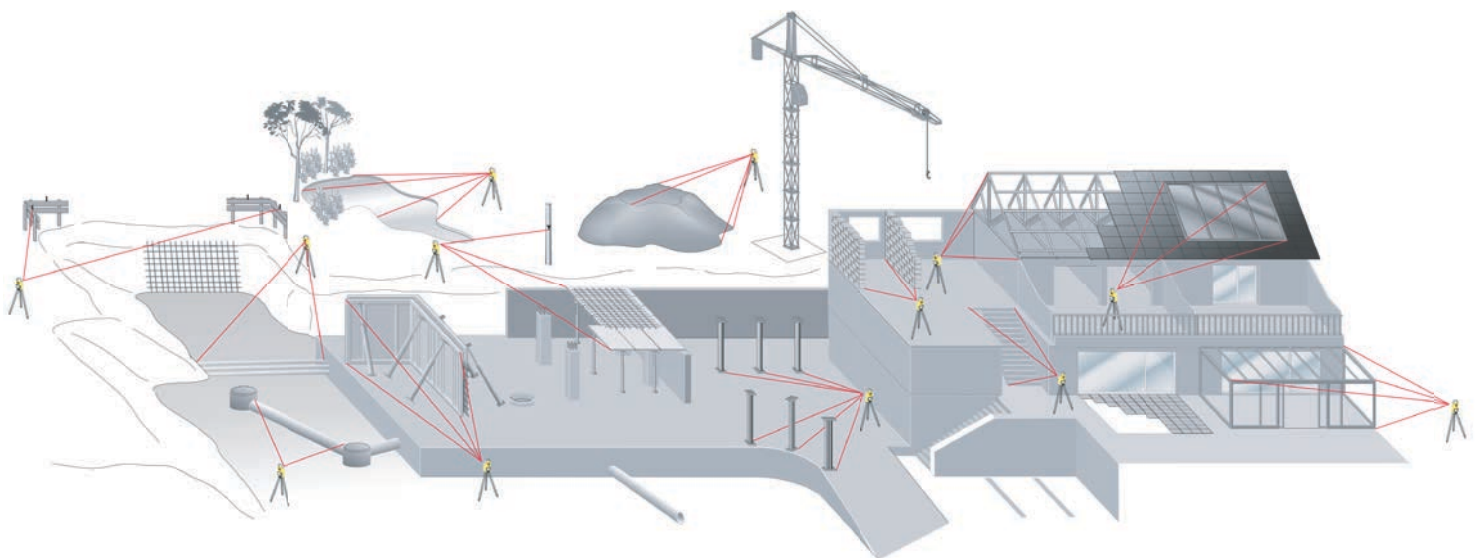
Leica iCON iCB70

The Leica iCON iCB70 manual construction total station makes you layout more points per day on your construction project with either prism or reflectorless measurements. Featuring mobile data capability, the iCB70 lets you transfer construction data between the office and the instrument directly, keeping your project progress and plans constantly up to date, assuring that you do not miss any changes in design. Facilitating the move from conventional analogue layout methods to modern digital workflows, the iCB70 helps you to achieve the productivity and accuracies demanded by the building construction industry.

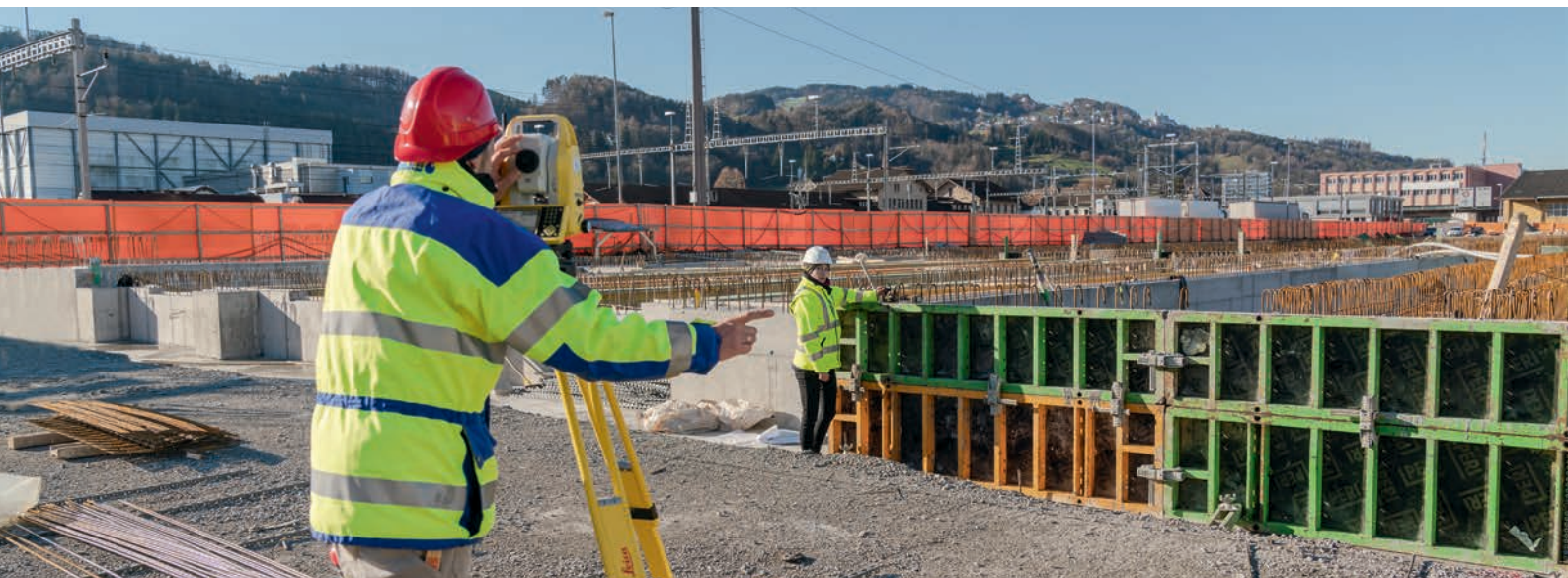**Leica iCON iCB70 & iCON build & CC80 Tablet**
Leica iCON 1" iCB70 Manual Total Station & iCON build Field Software & CC80 7" WIN Tablet.
Article no. 6015021

*More packages available. Please contact your responsible sales contact.

All Leica iCON iCB70 kits contain:
- Total Station
- USB stick
- Tribrach
- Tripod
- Charger
- Batteries
- Prism
- Pole
- Pole clamp for controller
- Bi-pod
- Total Station carry case
- Controller with accessories
- Controller carry case
- Field Software

Robotic Total Stations

Leica iCON iCR70

Leica Geosystems' robotic construction total station, the Leica iCON iCR70, allows users to prepare and execute construction tasks faster, simpler and more accurately. Designed for one-person operation, this robot gives you approximately an eighty per cent increase of productivity over other conventional layout practices. The iCR70 can be used by the existing construction workforce with minimal training and does not disrupt existing construction processes.

Leica iCON iCR70 & iCON build or iCON site & CC80 Tablet

Leica iCON 2" iCR70 Robotic Construction Total Station & iCON build Field Software & CC80 7" WIN Tablet.
Article no. 6013419

Leica iCON 2" iCR70 Robotic Construction Total Station & iCON site Field Software & CC80 7" WIN Tablet.
Article no. 6013424

*More packages available. Please contact your responsible sales contact.

All Leica iCON iCR70 kits contain:
- Total Station
- SpeedSearch, ATR, reflectorless mode
- Setup Pilot, Cube Search & Target Snap
- USB stick
- Tripod
- Tribrach
- Communication handle
- Charger
- Batteries
- Prism
- Pole
- Pole clamp for controller
- Bi-pod
- Total Station carry case
- Controller with accessories
- Controller carry case
- Field Software

Leica iCON iCR80 / iCR80S

The Leica iCON iCR80 construction total station keeps its 'eye' on only one thing: the user's target. Layout more points per day thanks to ATRplus, the most robust automated-aiming, lock and re-lock technology in the market. iCR80 is especially useful in congested sites with many distractions, such as reflections, machines and people moving around. Challenging and changing site conditions should not be an obstacle.

iCR80S

iCR80

Leica iCON iCR80 / iCR80S** packages:

Kit with Leica iCON iCR80 / iCON build / CC80
Leica iCON 2" iCR80 Robotic Construction Total Station & iCON build Field Software & CC80 7" WIN Tablet.
Article no. 6013433

Kit with Leica iCON iCR80 / iCON site / CC80
Leica iCON 2" iCR80 Robotic Construction Total Station & iCON site Field Software & CC80 7" WIN Tablet.
Article no. 6013439

* More packages available. Please contact your responsible sales contact.

** iCR80S R30 packages can be ordered by selecting the respective iCR80 R1000 package and changing the instrument to the iCR80S R30 article number in the ordering process.

All Leica iCON iCR80 / iCR80S kits contain:
- Total Station
- PowerSearch, ATRplus, reflectorless mode
- Setup Pilot, Cube Search & Target Snap, Prism Exclusion
- USB stick
- Tripod
- Tribrach
- Communication handle
- Charger, batteries
- Prism, pole
- Pole clamp for controller
- Bi-pod
- Total Station carry case
- Controller with accessories
- Controller carry case
- Field Software

Construction Layout Tool
Leica iCON iCT30

Increased complexity in construction projects and the strong trend towards digitalisation and Building Information Modelling (BIM) in the Building Construction industry make digital layout methods and processes crucial. Facilitating the move from conventional analogue measurement methods to modern digital layout techniques, Leica Geosystems developed the easy-to-use construction layout tool Leica iCON iCT30 to bring digital and automated layout technology to any construction site.

With a measurement range of up to 80 m and an angular accuracy of 9″, the iCT30 meets most requirements for layout applications. Forget about disturbances such as reflections, interruptions of line of sight or congestions that slow down the layout process. The iCT30 is specifically developed to robustly deal with difficult site conditions.

The Leica iCON iCT30 kits contain:
- Layout Tool
- Tribrach
- Tripod
- USB Stick
- Charger
- Batteries
- Prism
- Pole
- Pole clamp for controller
- Bi-pod
- Layout Tool carry case
- Controller with accessories
- Controller carry case
- Field Software

Leica iCON iCT30 & iCON build & CC80 Tablet
Leica iCON 9" iCT30 Construction Layout Tool &
iCON build Field Software & CC80 7" WIN Tablet.

Article no. 6015039

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Leica iCON GNSS Sensors
Construction GNSS Smart Antennas

Leica iCON gps 30
Entry-level GNSS RTK rover

With the Leica iCON gps 30, Leica Geosystems introduced an easy-to-use and economic solution for GNSS-based construction measurement tasks. Equipped with Leica iCON field software running on either the Leica iCON CC70 or CC80 controller, the iCON gps 30 solution provides consistently accurate positions through advanced RTK technologies. Designed with the operator in mind, the iCON gps 30 is an exceptionally lightweight and compact solution.

- Easy to use and equipped with the construction tailored Leica iCON site field software, the iCON gps 30 facilitates your entry into the Leica iCON GNSS portfolio.

- The light, compact and balanced design makes it comfortable to use and carry in the field.

- With the highest level of position reliability in its class, the iCON gps 30 delivers accurate results and increases productivity.

Basic iCG30 Global Kit; includes iCG30 & iCON site entry Software & CC70 7" Tablet PC & Pole Accessories
Article No. 6015691

Leica iCON gps 60

Leica iCON gps 60 is a versatile SmartAntenna for all construction positioning tasks. Featuring superior GNSS technology and various integrated communication options, it meets all your requirements for reliable and accurate measurements. Its intuitive display shows full status information of the instrument, simplifying operation and configuration. Leica iCON gps 60 also offers exceptional network capabilities allowing you to use RTK network services (Leica SmartNet and other networks) for highly reliable, improved GPS positions.

- Superior GNSS Technology for maximum accuracy and reliability. Features Leica SmartTrack+ and SmartCheck+ and Leica xRTK.
- Future-proof satellite tracking. Works with all existing and future satellite systems.
- SmartLink Fill – bridges RTK communication gaps up to 10 minutes
- 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.
- Unique communication flexibility, featuring integrated radio, modem and Bluetooth®.
- Integrated NTRIP Server and Caster for Internet based Reference Station.
- No controller required for base station set-up means you need less hardware.
- Unique flexible software licencing and feature upgrade concept. You can order packages or individual licences when you need them, investing when you need to.

iCON gps Base Station

iCON gps 60 GNSS SmartAntenna Base Station Kit; includes iCG60 Base Package & Case & Radio & Base Station Accessories.

Article no. 6015449

The iCON GNSS kits contain:
- iCG60 GNSS SmartAntenna
- Internal Satel or Intuicom Radio (optional)
- Radio antenna (optional)
- Radio antenna adapter (optional)
- Charger, Batteries
- Pole
- CC80 controller
- Bracket for controller
- Field Software
- Carry case

iCON gps Rover Packages with iCON site (iCON build)

iCON gps 60 GNSS SmartAntenna Network Kit; includes iCG60 Network Package & iCON site Field Software & CC80 7" Tablet PC & Pole Accessories.

Article no. 6015440 (6015445)

iCON gps 60 GNSS SmartAntenna Performance Kit; includes iCG60 Performance Package & iCON site Field Software & CC80 7" Tablet PC & Pole Accessories.

Article no. 6015441 (6015446)

Leica iCON gps 70 Series
Ultimate performance for your construction site

The Leica iCON gps 70 series represents the most efficient construction GNSS rovers. With the iCON gps 70 T you can measure and stakeout points quicker than ever before without the need to keep the pole vertical and level the bubble. The combination of the latest GNSS technology and inertial measurement unit (IMU) equips the iCON gps 70 T with permanent tilt compensation and makes it resistant to any magnetic interference. Being fully calibration-free, the iCON gps 70 T is ready when you are – anytime, anywhere.

- Permanent tilt compensation
- Calibration free
- Resistant to magnetic interferences
- Compact and lightweight housing
- Superior GNSS Technology for maximum accuracy and reliability. Features Leica SmartTrack+ and SmartCheck+ and Leica xRTK.
- SmartLink Fill – bridges RTK communication gaps up to 10 minutes
- SmartLink - Achieve centimetre accurate positioning worldwide - perfect when working in remote areas around the globe
- Unique flexible software licencing and feature upgrade concept. You can order packages or individual licences when you need them, investing when you need to.

iCON gps 70 (T) Rover Packages (site or build Field Software)*

iCON gps 70 GNSS SmartAntenna Value Kit; includes iCG70 Value Package & iCON site Field Software & CC80 7" Tablet PC & Pole Accessories.
Article no. 6013901

iCON gps 70 GNSS SmartAntenna Performance Kit; includes iCG70 Performance Package & iCON site Field Software & CC80 7" Tablet PC & Pole Accessories.
Article no. 6013902

iCON gps 70 T GNSS SmartAntenna Value Kit; includes iCG70 T Value Package & iCON site Field Software & CC80 7" Tablet PC & Pole Accessories.
Article no. 6013926

iCON gps 70 T GNSS SmartAntenna Performance Kit; includes iCG70 T Performance Package & iCON site Field Software & CC80 7" Tablet PC & Pole Accessories
Article no. 6013927

iCON gps 70 GNSS SmartAntenna Value Kit; includes iCG70 Value Package & iCON build Field Software & CC80 7" Tablet PC & Pole Accessories
Article no. 6013935

iCON gps 70 GNSS SmartAntenna Performance Kit; includes iCG70 Performance Package & iCON build Field Software & CC80 7" Tablet PC & Pole Accessories
Article no. 6013936

iCON gps 70 T GNSS SmartAntenna Value Kit; includes iCG70 T Value Package & iCON build Field Software & CC80 7" Tablet PC & Pole Accessories
Article no. 6013950

iCON gps 70 T GNSS SmartAntenna Performance Kit; includes iCG70 T Performance Package & iCON build Field Software & CC80 7" Tablet PC & Pole Accessories
Article no. 6013951

*More packages available. Please contact your responsible sales contact

Leica iCON Controllers
Rugged, lightweight controllers for un-compromising site work

Leica iCON CC70 / CC80 versatile tablet PC's are designed to transport a user's office directly to the field. The rugged, lightweight devices have a clear and easy-to-use 7" touchscreen designed to facilitate with data collection tasks on site, while at the same time communicating with the central office, real-time data transfer is made easy.

Leica iCON CC70

High-end controller designed for standard construction measure and stakeout tasks

Art. No.	Description
881163	CC70-0, Rugged 7" Tablet PC, EU/RUS
881164	CC70-1, Rugged 7" Tablet PC, USA/CAN
881165	CC70-2, Rugged 7" Tablet PC, AUS/NZ/IND
881166	CC70-3, Rugged 7" Tablet PC, China
881167	CC70-4, Rugged 7" Tablet PC, Japan
896148	CC70-5, Rugged 7" Tablet PC, South Korea

Leica iCON CC80

Rugged premium controller with maximum performance to boost all site tasks to improve productivity without compromises.

Art. No.	Description
878811	CC80-20, Rugged 7" Tablet PC, EU/RUS
878812	CC80-21, Rugged 7" Tablet PC, US/CAN
878813	CC80-22, Rugged 7" Tablet PC, AUS/NZ/IND
878814	CC80-23, Rugged 7" Tablet PC, China
878815	CC80-24, Rugged 7" Tablet PC, JP
881162	CC80-25, Rugged 7" Tablet PC, South Korea

Leica iCON CC70 / CC80
- Leica iCON CC70 / CC80 controller series are the world's thinnest and lightest fully-rugged 7" Windows® tablets and feature a battery life of up to 16 hours
- Large 7" sunlight readable touchscreen display for convenient operation
- Windows 10 multi-lingual, multi-touch operating system
- Various wireless communication possibilities (Bluetooth®, Wi-Fi and integrated 4G / LTS multi-carrier mobile broadband) for use with different sensors and internet access
- The CCD17 Bluetooth® radio kit extends the robotic working distance between the CC70 / CC80 tablet computers and Leica iCON or Nova total stations

Technical Data	iCON CC70	iCON CC80
Operating system	Microsoft Windows® 10 Pro	
CPU platform	Core i5-7Y57, 1.0 GHz	Core i5-7Y57 vPro, 1.2 GHz up to 3.3 GHz with Intel Turbo Boost Technology
RAM	4GB SDRAM (LPDDR3)	
Data storage	128 GB SSD	
Display	7" widescreen, 1280 x 800 resolution, 700 cd/m2 (Nits), sunlight readable, Gorilla Glass 3, 10-finger multi-touch	
Communications	Integrated 4G LTE multi carrier mobile broadband, Intel® Dual Band Wireless AC8260 Wi-Fi 802.11a/b/g/n/ac Bluetooth® v4.1 (Class 1) + EDR, L1 GPS integrated (depending on country variant)	
I/O Ports	1x USB 3.0 port,1 x DC power input; Docking connector (24 pin); 1x audio out, mini-jack stereo; integrated microphone and speaker	
Battery	Standard battery 7.2 V, 3200 mAh	Li-ion "Long life" battery: 7.2 V, 7100 mAh
Operating time	8 h (max. load test)	16 h (max. load test)
Weight	540 g (1.19 lbs)	640 g (1.41 lbs)
Camera	2 MP front webcam with dual microphone 8 MP rear camera with auto focus and LED light	
Operating temperature	-29 °C to 60 °C (-20 °F to 140 °F)	
Storage temperature	-51 °C to 71°C (-60 °F to 160 °F)	
Rain and dust	IP65	
Humidity	95% RH temp cycle 30 °C (86 °F) / 60 °C (140 °F)	
Drop	180 cm	
Vibration	MIL-STD-810G, Method 514.6, Procedure I, II	

Utility Detection

Whether you are protecting, mapping or creating an awareness of buried utilities Leica Geosystems offers a comprehensive product and software range.

Using the latest technology, detecting buried utilities becomes a simple and efficient task increasing your safety and the protection of buried utilities ultimately saving you time and money.

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Leica DSX Utility Detection Solution
Survey-grade utility detection and mapping

Quickly and easily locate and map underground utilities with the new Leica DSX non-destructive detection solution. DXplore software delivers instant, clear and accurate visualisation of utilities in the field. Integrating best practice, simple and most reliable workflow for utility detection and mapping. Plug'n'play solution with positioning sensors and easy export to machine control, delivering instant 3D utility map and assuring most productivity.

Starter Kit	Surveyor Kit
Article no. 6015139 Starter Kit DSX DXplore Perpetual DSX Utility Detection System, CT1000 Controller, DXplore Build (Perpetual), 2yr DSX Basic CCP, 2yr DXplore Build CCP	**Article no. 6015141 Surveyor Kit DSX DXplore Perpetual** DSX Utility Detection System, CT1000 Controller, PS1000 pole support, DXplore Build (Perpetual), DXplore Survey (Perpetual), 2yr DSX Basic CCP, 2yr DXplore CCP (Build + Survey)
Article no. 6015140 Starter Kit DSX DXplore Subscription DSX Utility Detection System, CT1000 Controller, DXplore Build (one-year subscription), 2yr DSX Basic CCP	**Article no. 6015142 Surveyor Kit DSX DXplore Subscription** DSX Utility Detection System, CT1000 Controller, PS1000 pole support, DXplore Build and Survey (one-year subscription), 2yr DSX Basic CCP

DSX Utility Detection System

DSX Utility Detection System	
Central Frequency (GPR)	600 MHz
Detection Mode	Grid Method
Detection Utilities	Water, gas, power/electric, telecom, fibreoptic, sewage, drainage
Detection Depth	Up to 2 m / 6.56 ft
Acquisition Speed	Up to 7 km/h or 4.3 mph
Scan Interval	0.50 m / 18 in
Positioning	2 encoders on wheels; GNSS antenna integration (Surveyor kit only)
Environmental	IP65
Weight	23 kg (without battery and tablet)
Battery	Li-ion 14.8 V / 5800 mAh up to 8 hours operating time
Operating Temperature	−10 °C to +40 °C / 14 °F to 104 °F
Warranty	2 years (extension CCPs available)

DXplore Software

DXplore Build
(perpetual)
Article no. 880850

(one-year subscription)
Article no. 5309894

(One week rental license)
Article no. 881125)

DXplore Survey
(perpetual)
Article no. 881123

(one-year subscription)
Article no. 5309895

(One week rental license)
Article no. 881126)

| DXplore		Starter	Surveyor
Setup	Animation tutorials	✓	✓
	Status check (connection, battery level, etc.)	✓	✓
	Project and draft management	✓	✓
	GNSS antenna configuration wizard		✓
Acquisition	Grid Scan mode	✓	✓
	Radar sensor control (scan and pause, etc.)	✓	✓
	DSX cart position and scan trajectory displayed in 3D		✓
Positioning	Location from wheel encoders	✓	✓
	Google Maps and current location support	✓	✓
	Local coordinate system support		✓
	GNSS antenna and TPS support		✓
	Accuracy check in all screens		✓
	Geoid corrections		✓
Process & Analysis	On-site radar tomography generation	✓	✓
	POI support	✓	✓
	Utility marking	✓	✓
	Automatic utility verification	✓	✓
	Georeferencing with positioning data		✓
View	Animation on tomography slices	✓	✓
	2D/3D view	✓	✓
	Lead to utility viewer		✓
Import	Utility records in DXF, DWG and ESRI shape file		✓
	Multiple layer support		✓
Export	Report in PDF format	✓	✓
	Detected utilities in DXF format	✓	✓
	Tomography in png, jpg, tiff, bmp, and gif format	✓	✓
	Output in selected local coordinate systems		✓
	MC1 (.lok supported)		✓
	WGS84 ellipsoid, reference ellipsoid, orthometric height		✓

CT1000 Controller

with LTE
Article no. 880920

without LTE
Article no. 880929
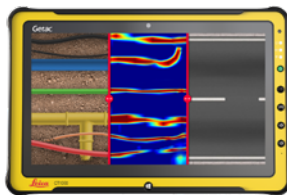
Accessories

Grid Assistance square
Article no. 880909

PS1000 Pole support
(for positioning
system)
Article no. 880854

AB1000 Accessory Bag
Article no. 880867

RBM1000 Ram Ball
Mount Interface
Article no. 891410

TC1000 Tablet Cradle
Article no. 891411

DSX battery Li-ion
14.8 V / 5.8 Ah
Article no. 793975

DSX battery charger
Article no. 852413

Leica DS2000 Utility Detection Radar
Uncovering safer, faster, more

The Leica DS2000 Utility Detection Radar finds all potential threats, including non-conductive pipes and fibre optics, increasing safety by lowering the risk of accidently hitting underground assets. Increase safety, speed up work and lower asset management costs with the ability to prevent hazardous outages and collect more information. The DS2000 betters your business by making it safer, faster and more efficient.

Utility Detection Radar and Controllers
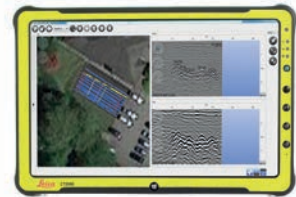
Starter Kit DS2000, 4 Wheel Utility Radar
Starter Kit DS2000-4, 4 wheel Radar Utility Detector, Battery Pack, Charger, USB Stick and CT1000 Controller.
Article no. 6011496

Surveyor Kit DS2000
DS2000, 4 wheel Radar Utility Detector, Battery Pack, Charger, USB Stick, CT1000 Controller and GNSS Antenna Support.
Article no. 6011498

Accessories

AS2000 GNSS Antenna Support
Article no. 847113

Leica ULTRA
Precision locating for utility tracing

The Leica Ultra provides our most advanced utility tracing system. Intelligent signal processing, flexible operating modes and a range of accessories provide optimum performance.

Leica ULTRA Locator
The Leica ULTRA is a precision utility tracing instrument configurable for extensive range of applications and allows for 100 customized frequencies and shows direction to the utility through left/right guidance arrows and an on-screen compass.
Article no. 818699

Leica ULTRA Advanced Locator
The Leica Ultra Advanced has the same functionality as the Ultra locator, with the added benefit of Bluetooth connectivity, remote transmitter link, Offset Depth measurements and Ambient Noise measurement.
Article no. 818698

Leica ULTRA Signal Transmitter
The Leica Ultra Signal transmitter range provides the highest degree of flexibility, performance and durability to suit your tracing needs. Standard models offer multiple trace frequencies that can be configured for specific tasks and are available in 5-Watt or 12-Watt options. The 12-Watt Advanced model has the added benefit of a Bluetooth link to the locator enabling the operator to control the transmitter directly from the Ultra Advanced locator.
Article No. 818702 Ultra 5-Watt Signal Transmitter
Article No. 818701 Ultra 12-Watt Signal Transmitter
Article No. 818700 Ultra Advanced 12-Watt Signal Transmitter
Article No. 818709 Transmitter Li-ion Battery pack

Leica ULTRA Locators

	Standard	Advanced
Frequency range	50 Hz - 200 kHz	
Depth	max 6 m	
Depth accuracy	In line - ±5% to 3 m Sonde - ±5% to 3 m Passive - ±5% to 3 m	
Enabled frequencies	512 Hz, 3.14 kHz, 8.192 kHz, 32.768 kHz, 83.1 kHz, 200 kHz	
Custom frequencies	Up to 100 custom frequencies from 256 Hz - 83 kHz	
Line direction compass with proportional L/R arrow guidance	Yes	Yes
Offset depth		Yes
AIM		Yes
Receiver / transmitter communications		Yes
Bluetooth® connectivity		Yes
PROTECT service offering	Manufacturer's Warranty: 1 year	

Leica ULTRA Transmitters

	5 WATT	12 WATT	Advanced
Power output	5 W	12 W	12 W
Enabled frequencies	512 Hz, 3.14 kHz, 8.192 kHz, 32.768 kHz, 83.1 kHz, 200 kHz		
Custom frequencies	Up to 100 custom frequencies from 256 Hz - 83 kHz		
External 12V power connection			Yes
Dual output			Yes
Receiver / transmitter communications			Yes
PROTECT service offering	Manufacturer's Warranty: 1 year		

Leica ULTRA Accessories

1 A Frame

Buried cable sheath fault finder.

Article no. 818708

2 Transmitter Signal Clamps

For use with ULTRA system signal transmitter.

Article no. 818704 125 mm (5") Multi Clamp
Article no. 818705 178 mm (7") Multi Clamp
Article no. 832972 80 mm (3.15") Broadband
**   Clamp**

3 RFID Reader

For locating buried marker balls.

Article no. 842432

4 Receiver Stethoscope

Article no. 842433

5 Ultra Locator Bag

Article no. 818706

6 Receiver Signal clamp

Article no. 842434

7 Ultra Live Power Adapter

Article no. 842435

8 Dual Output cable

Article no. 818711

Leica DD 100 Series Locators
Safe and fast location of underground utilities

The Leica DD100 series locators reduce the complexity normally associated with locating of buried utilities. The DD100 series automated pinpointing process improves the detection of utilities, reduces utility damage and increases workforce safety.

Leica DD120

For construction professionals who need to understand what is beneath their sites, the Leica DD120 cable locator is a simple, intuitive locator designed to detect and avoid buried utilities throughout the excavation phase. The DD120 automated pin-pointing process improves the detection of utilities, reducing utility damage and improving workforce safety.
Use the DD120 in conjunction with a DA220 signal transmitter or range of accessories to achieve depth estimation, improved accuracy and application scope.

Article no. 50 Hz 872938 / 60 Hz 872939

Leica DD130

For all professionals who need to accurately locate and trace buried utilities, the new Leica DD130 cable locator features additional tracing capabilities and increased depth detection in an easy, intuitive product. The DD130 delivers consistent and precise location capabilities for increased user confidence.
Use the DD130 in conjunction with a DA230 signal transmitter or range of accessories to achieve depth estimation, improved accuracy and application scope.

Article no. 50 Hz 872940 / 60 Hz 872941

Technical Data	DD120	DD130
Power	50 Hz model or 60 Hz model	50 Hz model or 60 Hz model
Radio	15 kHz to 60 kHz	15 kHz to 60 kHz
Auto	Power, Radio	Power, Radio,
Transmitter Modes	32.768 (33) kHz, 8.192 (8) kHz	32.768 (33) kHz, 8.192 (8) kHz, 512 Hz, 640 Hz
Depth Range Line	0.3 m to 3 m / 1 ft to 10 ft	0.3 m to 3 m / 1 ft to 10 ft
Sonde	0.3 m to 3 m / 1 ft to 10 ft	0.3 m to 9.99 m / 1 ft to 32.77 ft
Depth Accuracy*	10%	10%
Protection	IP54	IP54
Operating Temperature	-20 °C to +50 °C / -4 °F to +122°F	-20 °C to +50 °C / -4 °F to +122°F
Battery	6 x LR6 (AA) Alkaline	6 x LR6 (AA) Alkaline
Battery operating time**	15 h	15 h
Dimensions (H x W x D)	760 x 250 x 85 mm / 30 x 10 x 3.4 inches	760 x 250 x 85 mm / 30 x 10 x 3.4 inches
Weight with batteries	2.7 kg / 6 lbs	2.7 kg / 6 lbs
Warranty	1 year	1 year

* Depth to an undistorted signal
** Constant use at 20 °C / 68 °F

Leica DD SMART Utility locators
Work safer, work smarter, work simpler

The Leica DD SMART utility locators and DX Shield software open the door to a connected world, anywhere, anytime. Leica DD SMART utility locators detect underground assets deeper, faster and more accurately. The DD SMART utility locators are scalable and designed with onboard memory, GPS and Bluetooth technology. Connect and download data stored in the DD SMART utility locators' internal memory, including GPS positioning and transfer it back to the DX Shield software for analysis. DD SMART locators and DX Shield software assure maximum protection and safety on site by offering the best in class detection performance and allowing organisations to gain a better understanding of locating task performance and site complexities before any excavating jobs.

Leica DD220 SMART utility locator

The Leica DD220 SMART utility locator is an easy to use, intuitive locator simplifying the detection of buried utilities and increasing user confidence. With automated pinpointing technology and a clear visible colour display, the DD220 SMART utility locator discovers buried utilities with confidence. On-board video support, usage alerts and diagnostics, combine to improve product use and, protect operators and utilities.
Use the DD220 in conjunction with a DA220 signal transmitter or range of accessories to achieve depth estimation, improved accuracy and application scope.

Article no. 850268

Leica DD230 SMART utility locator

The Leica DD230 SMART utility locator combines enhanced trace capabilities, producing greater detection accuracy and increased distance tracing with an intuitive, user-friendly package. With added confidence, you can locate and trace deeper and further than ever before. With an innovative antenna design, large colour screen and advanced digital signal processing, the DD230 provides reliable performance through easy operation, detecting the smallest signals in the most congested areas.
Use the DD230 in conjunction with a DA230 signal transmitter or range of accessories to achieve depth estimation, improved accuracy and application scope.

Article no. 50Hz: 850270

Technical Data	DD 220 SMART	DD230 SMART
Power	50 Hz / 60 Hz mains electrical and harmonics	50 Hz / 60 Hz mains electrical and harmonics
Radio	15 kHz to 60 kHz	15 kHz to 60 kHz
Auto	Power, Radio, 33 kHz	Power, Radio, 33 kHz
Transmitter Modes	131.072 (131) kHz, 32.768 (33) kHz, 8.192 (8) kHz	131.072 (131) kHz, 32.768 (33) kHz, 8.192 (8) kHz, 512 Hz, 640 Hz
Depth Range Line	0.1 m to 5 m / 4 inches to 16.4 ft	0.1 m to 7m / 4 inches to 23 feet
Sonde	0.1 m to 7 m / 4 inches to 23 feet	0.1 m to 10 m / 4 inches to 32.8 feet
Depth Accuracy*	5%	5%
Bluetooth	Class 2 BLE dual mode module	Class 2 BLE dual mode module
GPS**	u-blox® L1 GPS Integrated	u-blox® L1 GPS Integrated
Memory Capacity	8 GB internal memory	8 GB internal memory
Protection	IP66	IP66
Operating Temperature	-20 °C to +50 °C / -4 °F to +122°F	- 20 °C to +50 °C / -4 °F to +122°F
Battery	7.4 V Li-ion	7.4 V Li-ion
Battery operating time***	20 h	20 h
Weight with batteries	2.7 kg / 6 lbs	2.7 kg / 6 lbs
Warranty	3 years	3 years

* Depth to an undistorted signal

** Data / information according to manufacturer u-blox®GPS; Leica Geosystems does not assume any liability whatsoever for such information

*** Constant use at 20°C / 68°F

Leica DA Signal Transmitters
Fully protected in the harshest conditions

The Leica DA Signal Transmitters increase performance and application scope allowing you to detect more utilities. The DA signal transmitters are compact, robust and easy-to-use, designed to maximise the performance of the DD locator range and the detection of utilities.

Leica DA220 Signal Transmitter
The Leica DA220 Signal Transmitter, simple, intuitive signal transmitter improving site safety during utility avoidance tasks. Four power level settings and three trace frequencies put you in control improving the detection of utilities.

Use the DA220 Signal Transmitter in conjunction with a DD120 locator or a DD220 SMART locator.
Article no. DA220 1 Watt 850272, DA220 3 Watt 850273

Leica DA230 Signal Transmitter
The Leica DA230 Signal Transmitter, simple, intuitive signal transmitter designed to keep you safe during excavation tasks, additional trace frequencies allow you to trace utility routes further and deeper. Four power level settings and five trace frequencies put you in control of utility avoidance or utility trace applications.

Use the DA230 Signal Transmitter in conjunction with a DD130 locator or a DD230 SMART locator.
Article no. DA230 1 Watt 850274, DA230 3 Watt 850275

Technical Data	DA220	DA230
Induction Mode Frequencies	32.768 (33) kHz, 8.192 (8) kHz	32.768 (33) kHz, 8.192 (8) kHz
Induction Mode Power Output	Up to 1 W max.	Up to 1 W max.
Connection Mode Frequencies	131.072 (131) kHz, 32.768 (33) kHz, 8.192 (8) kHz	131.072 (131) kHz, 32.768 (33) kHz, 8.192 (8) kHz 512 Hz, 640 Hz
Connection Mode Power Output* 1-Watt Model 3-Watt Model	Up to 1 W max. Up to 3 W max.	Up to 1 W max. Up to 3 W max.
Protection	IP67	IP67
Operating Temperature	-20 °C to +50 °C / -4 °F to +122°F	-20 °C to +50 °C / -4 °F to +122 °F
Battery	7.4V Li – Ion	7.4V Li – Ion
Battery operating time **	15 h	15 h
Dimensions (H x W x D)	250 x 206 x 113 mm (9.84 x 8.11 x 4.45 inches)	250 x 206 x 113 mm (9.84 x 8.11 x 4.45 inches)
Weight with batteries	2.38 kg 5.25 lbs	2.38 kg 5.25 lbs
Warranty	3 years	3 years

* Utility impedance of 300 Ohms
**Defined at 20°C (77°F) power level 2

DD Locator and DA Signal Transmitter Accessories

TRACE RODS

Used with the DD Locators and DA Signal Transmitter to trace the route of non metallic drains, ducts or pipes. Available in 50 metre or 80 metre lengths

Article No.	Description
850278	Trace Rod 50M
850279	Trace Rod 80M

TRANSMITTER CLAMPS

Used with the DA Signal transmitter to apply a trace signal to utilities such as telecom cables, power cables and pipes.

Article No.	Description
850280	Transmitter Clamp 100 mm (4"), Compatible with 33 kHz signal transmitters
850281	Transmitter Clamp 80 mm (3.15"), Compatible with 256 Hz to 200 kHz signal transmitters

PROPERTY PLUG CONNECTOR

Used with the DA Signal transmitter to apply a trace signal to residential electrical supplies

Article No.	Description
850282	Property Plug connector – UK
850283	Property Plug connector – Eu
850284	Property Plug connector – US
850285	Property Plug connector – Ch
850286	Property Plug connector - Aus

SONDES

Used to trace the route of drains, sewers, plastic pipes and ducts. Available in many sizes to cover a wide range of applications.

Article No.	Description
850288	Mini Sonde 33, 18 mm (0.7") diameter with a 33 kHz output. Working range 7 m (23ft)
850289	Midi Sonde 8/33, 38 mm (1.5") diameter with an 8 kHz or 33 kHz output. Working Range 5 m (16.4ft)
850290	Maxi Sonde 8/33, 55 mm (2.17") diameter with an 8 kHz or 33 kHz output. Working range 12 m (39.4ft)
856131	Duct Sonde 33, 24 mm (0.95") diameter with a 33 kHz output. Working Range 5 m (16.4 ft)
850291	Clamp Sonde 33, 40 mm (1.57") diameter with a 33 kHz output. Clamp sonde clamps onto a 12 mm (0.74 inch) flexible rod. Working range 5 m (16.4 ft)

Carry Bags

Fabric carry bag for the DD locator range

Article No.	Description
850276	Locator system carry bag for the DD locators, DA signal transmitters and accessories
850277	Leica DD220, DD230 Locator Bag

Batteries, Chargers and Cables

Article No.	Description
845900	Leica DD SMART, DA Li-ion Battery
790417	A100 - Li-ion Charger
797750	A140 - Car Adapter Cable
850287	Transmitter cable extension

Detection Software and Services

Increase your efficiency, quality of your detection results and store your detection data with Leica Detection Software solutions.
Leica Detection Software is designed to ensure easy use, high performance and fulfil your needs both utility avoidance and mapping applications.

Leica DX Manager Mapping

One central dashboard for all the Leica Geosystems Detection solutions

Leica DX Manager is the only enterprise grade utility mapping solution on the market. A unique cloud-powered solution that delivers unparalleled performance. Manage projects, tasks and spatial data from one central dashboard for all the Leica Geosystems Detection solutions.

1 month DX Manager Mapping Starter Package

1 month DX Manager Mapping Software with 10 GB cloud service and 1 Mapping Master.

Article no. 5307646

1 month Mapping Master

1 month Mapping Master access for 1 user, including: web portal access, DS2000 data management, locator data with GIS position, task management and mobile forms.

Article no. 5307647

1 month Mapping Surveyor

1 month Mapping Surveyor access for 1 user, including: DS2000 data management and locator data with GIS position

Article no. 5307649

1 month Mapping Analyzer

1 month Mapping Analyzer access for 1 user, including: web portal access and DS2000 data management

Article no. 5307653

1 month Mapping Inspector

1 month Mapping Inspector access for 1 user, including: DS2000 data management and task management and mobile forms

Article no. 5307654

1 month DX Manager 10GB Cloud Space

1 month DX Manager Cloud Space of 10 GB

Article no. 5307655

Utility detection integration

Leica DX Manager integrates all the Leica Geosystems Detection portfolio into a simple survey workflow, empowering the user to apply locator depth measurements to GNSS measurements. The result is a seamless fusion of both worlds – with all locator related data reviewable either in Leica DX Manager or any export format.

Leica DX Manager - Key Benefits

- Simplified processes
- Improvement of data quality and accuracy
- Consistent data collection methods
- Integration of DS2000, cable locators and asset mapping data
- Workflows to maintain data integrity

DX Shield Software
Connect with DD SMART locators and Bluetooth enabled Digicats

DX Shield software focuses on site protection allowing organisations to gain a better understanding of task performance and site complexities. Easy-to-use reports provide a fast and convenient overview of product use, enabling businesses to identify training needs and skills gaps – leading to reduced utility strikes.

- Protect your personnel
- Protect your assets
- Protect the infrastructure
- Protect your reputation
- Give you insights into how your equipment is used
- Work safer, work smarter, work simpler
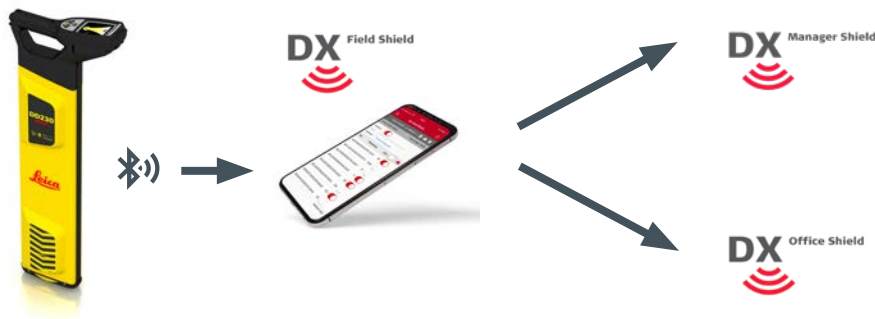
DX Field Shield
- Connects field activities to DX Manager Shield
- Connects field activities to DX Office Shield
Download from the Apple App Store

DX Office Shield
- Processes & reports on the locator usage information
- Connects to CalMaster and link to the web for web calibration verification
Download from Leica Geosystems website

DX Manager Shield
- Centralised, accessible information
- Processes & reports on the locator usage information
- Holds all site documentation e.g. health & safety forms
- Keeps all site photos logged in the project folder
- Standard, Pro or Expert levels, there's a version that's right for your business
Create an account at www.dxmanagershield.leica-geosystems.com

DX Manager Shield - Standard Account
Register online and create a free account. Viewable data over a 3 month rolling period, with basic system and report functionality. Subscribe and upgrade for additional functionality.

DX Manager Shield - Pro Subscription
1 year DX Manager Shield Pro licence for 1 user. Viewable data over a 12 month rolling period. Additional team management structuring, report functionality and map options than the Standard account Article No. 5309201

DX Manager Shield - Expert Subscription
1 year DX Manager Shield Expert licence for 1 user. Viewable data over a 24 month rolling period. Additional automated reporting, Site Notes and Photo upload than the Pro Subscription. Article No. 5309202

Leica Detection Campus

Our Detection Campus provides you with a thorough insight in to our extensive portfolio of detection solutions.

Currently 3 different courses are offered:

- Utility Surveyor Course
- Precision EML Course
- Ground Penetration Radar Course

Utility Surveyor Course

An interactive, five-day training course for those looking to learn the skills and knowledge needed to become a Utility Surveyor.

This utility surveyor course aims to bring even the greenest novice to a point where they can comfortably take a utility survey from initial client specification all the way through to delivering a fully marked up map detailing what lies beneath. This will be done through a series of classroom and onsite modules, over a five day period.

With this course, we aim to train the market in the world's first digitised utility survey workflow. By educating users in the best, most methodical approach to utility surveying using cutting edge detection, positioning and mapping technology, alongside powerful, intuitive software, Leica truly has created a world-first for the industry.

Increased sales of avoidance and mapping tools from CATs to GPR in recent years, have emphasised the need for a global training standard not only for users of the equipment but also for the people planning and carrying out the work.

With the introduction of this new course we can now confidently state that we will have utility surveying covered in terms of equipment, software and skills. We supply the whole package, giving our customers peace of mind at each stage of the workflow.

Who should attend?

Due to the tailored nature of the course, it suited to everyone - from complete utility novice all the way up to Surveyors looking to upskill and Utility Surveyor looking to increase their efficiency with new technology and processes.

Course modules

- Relevance and market
- The components of a utility survey
- Surveying specifications
- Understanding utility maps
- Using a precision locator
- Using GPR
- Real life site survey - training site
- Digital EML data capture
- Data export, review and post processing

5004724	Utility Surveyor Course	Utility Surveyor Course (5 Day) An interactive, five-day training course for those looking to learn the skills and knowledge needed to become a Utility Surveyor (excluding transportation time and costs, accommodation costs)
5004723	Group Utility Surveyor Course	Utility Surveyor Course (5 Day) An interactive, five-day training course for those looking to learn the skills and knowledge needed to become a Utility Surveyor. For up to 8 participants (excluding transportation time and costs, accommodation costs)

How to book

Email: detection-training.geo@leica-geosystems.com

Precision EML Course

Learn how to use precision locators to trace and map utilities. Develop your skills even further using the latest positioning and mapping equipment.

This two day precision locator course looks at the theoretical and practical aspects of precision locating.

You will begin with a short classroom session looking at the principles and limitations of precision locating, ensuring you know where your locator will work and where it will not. You will touch on the modes of location and move on to working with a signal transmitter and locating accessories to improve your locating success. During the course you will also work with GPS and GNSS for tracing and mapping utilities. By the end of the course you should be confidently able to locate, trace and map buried utilities using a precision locator.

Who should attend?

This course is aimed at people who need to trace and map buried utilities using specialist equipment such as the Leica Ultra.

Course modules

- Legislation and regulations
- PAS128 & 256
- Electromagnetic locators
- Understanding utility maps
- Using a precision locator
- Site survey
- Data export and review

5004725	EML Tracing and Mapping	Precision Locators Tracing and Mapping (2 days) Learn how to use precision locators to trace and map utilities. Develop your skills even further using the latest positioning and mapping equipment. (excluding transportation time and costs, accommodation costs)
5004726	Group EML Tracing and Mapping	Precision Locators Tracing and Mapping (2 days) Learn how to use precision locators to trace and map utilities. Develop your skills even further using the latest positioning and mapping equipment. For up to 8 participants (excluding transportation time and costs, accommodation costs)

How to book

Email: detection-training.geo@leica-geosystems.com

Ground Penetrating Radar Course

Over the course of this three-day training course you will learn how to use GPR and how to process and use the data you capture.

Our three-day, GPR training course looks at the principles and limitations of the technology, gives attendees plenty of practical hands-on time with the kit and goes through reading and post-processing site scans. At the end of this course you will be able to confidently carry out a GPR survey, understanding even the most complex of environments and deliver accurate maps of your survey area.

Who should attend?

This course is aimed at people who want to become competent in all aspects of GPR usage from marking out your scan area to post-processing your results.

Course modules

- Legislation and regulations
- PAS128 & 256
- Understanding utility maps
- Principles and limitations of the technology
- Using GPR
- Site survey
- Positioning methods
- Data export and review
- Post processing

5004727	GPR Application to Deliverable	GPR Application to Deliverable (3 days) Over the course of this three-day training course you will learn how to use GPR and how to process and use the data you capture. (excluding transportation time and costs, accommodation costs)
5004728	Group GPR Application to Deliverable	GPR Application to Deliverable (3 days) Over the course of this three-day training course you will learn how to use GPR and how to process and use the data you capture. For up to 8 participants (excluding transportation time and costs, accommodation costs)

How to book

Email: detection-training.geo@leica-geosystems.com

*all Leica Detection Campus courses can either be held in our training centre in the UK or on request locally in your region.

Leica Geosystems - when it has to be right.

Revolutionising the world of measurement and survey for nearly 200 years, Leica Geosystems creates complete solutions for professionals across the planet. Known for premium products and innovative solution development, professionals in a diverse mix of industries, such as surveying and engineering, safety and security, building and construction, and power and plant, trust Leica Geosystems to capture, analyse and present smart geospatial data. With the highest-quality instruments, sophisticated software and trusted services, Leica Geosystems delivers value every day to those shaping the future of our world.

Leica Geosystems is part of Hexagon (Nasdaq Stockholm: HEXA B; hexagon.com), a leading global provider of information technologies that drive quality and productivity improvements across geospatial and industrial enterprise applications.
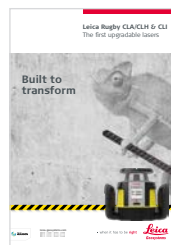
Swiss Technology
by Leica Geosystems

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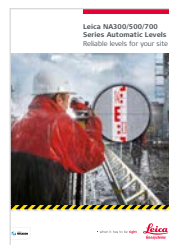
LASER
2

⚠ CAUTION
LASER
3R

in accordance with IEC 60825-1*

* According to product specific technical details

Leica Rugby CLA/CLH & CLI
The first upgradable lasers

Leica NA300/500/700 Series Automatic Levels
Reliable levels for your site

Leica iCON iCB50 & iCB70
Manual total stations for construction

Leica DISTO™
The original laser distance meter

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- when it has to be **right**