

# Leica Geosystems Construction Catalogue Tools for any site



leica-geosystems.com

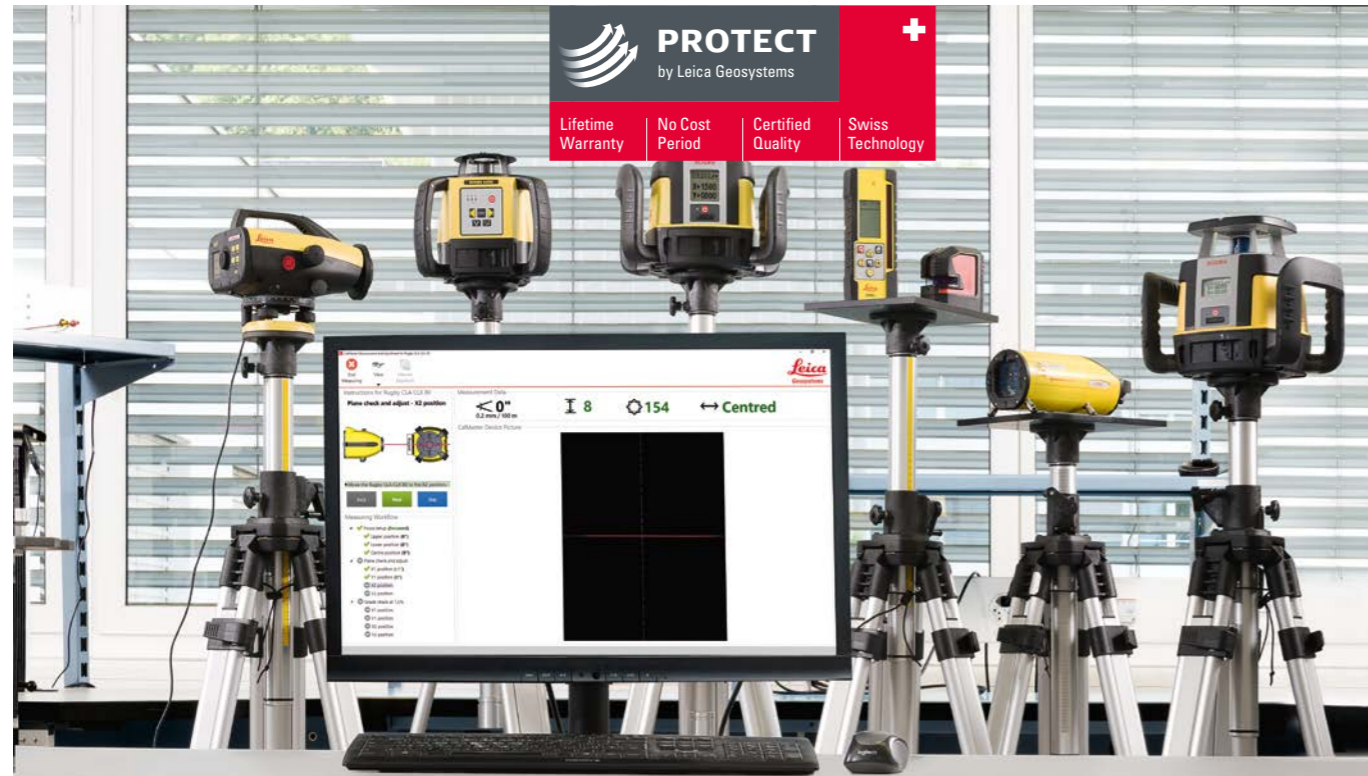


- when it has to be **right**

**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 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-geosystems.com/protect](http://www.leica-geosystems.com/protect).

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# 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.



**06-11** Leica DISTO™ Family



**12-17** Leica iCON trades



# 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 into 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™ 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 P2P measurements and all measured data is easily documented and visualised with the Leica DISTO™ Plan app.

**Article no. 850833**



## 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™ X6

Robust and Versatile

In addition to all the features of the Leica DISTO™ X3, the Leica DISTO™ X6 is equipped with a digital Pointfinder, which is ideal for bright sunlight or long distances. A variety of measurement functions, such as Smart Horizontal Mode, height tracking, profile or angle measurements, ensure that any measurement situation can be completed quickly and efficiently. The results can be downloaded as a report and integrated directly, e.g. in quotations, ensuring an error-free, digital workflow. The Leica DISTO™ X6 can be extended with the Leica DST 360-X tripod adapter for P2P measurements.

**Article no. 950909**



## Leica DISTO™ D5

Strong Outdoors

Thanks to its digital Pointfinder, the Leica DISTO™ D5 ensures accurate aiming and precise results even in very bright environments and over long distances. Various measuring functions, such as the Smart Horizontal Mode for measuring over obstacles, height tracking, profile or angle measurements, ensure a perfect solution for every measuring task. The contactless triggering of the distance measurement by gestures avoids moving the device and thus guarantees highly precise measurements, especially for small targets or large distances.

**Article no. 950908**

**Article no. 950879 Leica DISTO™ D5 Package**



## Leica DISTO™ X6 P2P Package

This package is the ultimate complete solution for P2P measurements when it comes to distance measurements in inaccessible areas or complex measurement situations. It also enables a fully digital work process, as the captured measurement results can be further processed in any CAD software. It includes a DST 360-X adapter with a Leica TRI 120 tripod in a stackable metaBOX, which means you have everything safely and conveniently to hand.

**Article no. 950878 Leica DISTO™ X6 P2P Package**



# Unique Leica P2P Technology

## Efficient Measurement for Digital Workflows

The P2P Technology from Leica Geosystems is an advanced method of indirect measurement. This innovative technology makes it possible to measure the distance between any two points quickly and easily from one location. It is not necessary to take measurements at right angles or in a plane. This makes P2P Technology a safe, accurate and efficient method, especially for distance measurements in inaccessible areas or areas with complex shapes. In addition, the captured data can be further processed in any CAD software.



### P2L Technology

The P2L measurements can be used to determine a position relative to a reference line. This function is useful to document and find points in a local coordinate system. This is particularly useful when the point of interest is later no longer visible or accessible.



# Leica DISTO™ Family

## Technical data

| Technical Data                          | DISTO™ D1   | DISTO™ D110        | DISTO™ D2             | DISTO™ D5                   | DISTO™ X3             | DISTO™ X6                   |
|---|---|--------------------|-----------------------|-----------------------------|-----------------------|-----------------------------|
| Typical accuracy                        | ±2.0 mm   | ±1.5 mm            | ±1.5 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 - 200 m                | 0.05 - 150 m          | 0.05 - 250 m                |
| Measuring units                         | m, ft, in   | m, ft, in          | m, ft, in             | m, ft, in                   | m, ft, in             | m, ft, in                   |
| Tilt sensor                             |   |                    |                       | 360°                        | 360°                  | 360°                        |
| Colour display with digital Pointfinder |   |                    |                       | 4x zoom, Overview camera    |                       | 4x zoom, Overview camera    |
| Wireless interface (low energy)*        | Bluetooth® 4.2  | Bluetooth® 4.2     | Bluetooth® 4.2        | Bluetooth® 5.0              | Bluetooth® 4.2        | Bluetooth® 5.0              |
| Batteries                               | Type AAA 2 x 1.5 V  | Type AAA 2 x 1.5 V | Type AAA 2 x 1.5 V    | Li-Ion rechargeable battery | Type AA 2 x 1.5 V     | Li-Ion rechargeable battery |
| Dimensions                              | 115 x 43.5 x 23.5 mm  | 120 x 37 x 23 mm   | 116 x 44 x 26 mm      | 144 x 60 x 24 mm            | 132 x 56 x 29 mm      | 154 x 68 x 25 mm            |
| Weight with batteries                   | 87 g  | 92 g               | 100 g                 | 180 g                       | 184 g                 | 230 g                       |
| Memory                                  |   |                    | 10                    | 50                          | 20                    | 300 reports                 |
| Multifunctional end-piece               |   |                    | Automatic recognition | Automatic recognition       | Automatic recognition | Automatic recognition       |
| Laser class                             | Class 2   | Class 2            | Class 2               | Class 2                     | Class 2               | Class 2                     |
| Protection class                        | IP54  | IP54               | IP54                  | IP54                        | IP65                  | IP65                        |
| Warranty                                | 2 years warranty<br>3 years warranty after registration on <a href="http://www.disto.com">www.disto.com</a> |                    |                       |                             |                       |                             |

\*System requirements and other details can be found at [www.disto.com](http://www.disto.com)

# Leica DISTO™ Plan

## Document and Visualise Measurements

### Document Measurements Digitally

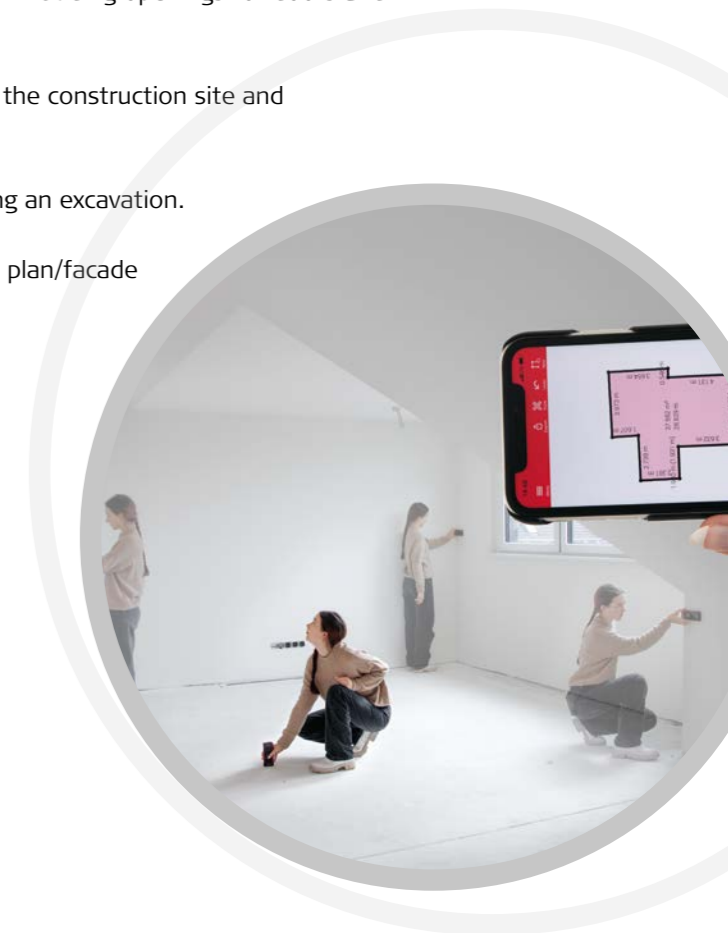
The Leica DISTO™ Plan app supports the important task of documenting and visualising measurements directly on the construction site. This allows easy planning of the next steps of a project. Depending on the measurement tasks and preferences, the following functions are available to assist.

- **Sketch on Photo** – assigns distance measurements to the appropriate part of a picture taken with a tablet or smartphone.
- **Sketch Plan** – create a sketch on your smartphone or tablet, assign measurements and create a scale drawing.
- **Smart Room** – creates accurate floor plans simply by taking clockwise or counter-clockwise measurements of a room.

### Capture 2D and 3D data for CAD

Leica DISTO™ devices with P2P function and the DISTO™ Plan app allow detailed recording of rooms using 3D coordinates. This means that the data can be easily processed in any CAD software. Depending on the measurement tasks and preferences, the following functions are available.

- **Measure Plan / Facade** – creates detailed floor and wall plans – including openings for doors and windows.
- **Measure 3D** – visualises complex 3D measurements directly on the construction site and immediately shows what has been measured.
- **Earthworks** – enables volume measurements, such as calculating an excavation.
- **Relocation** – the Leica DISTO™ can easily be relocated during a plan/facade or 3D measurement and continued from the new location



# Leica DISTO™ Family

Accessories supplied with / optional

## 1 TRI 75 Tripod

The small portable tripod is intended for everyday use. Its features include easy fine adjustment and a bubble level. Extendable length from 0.42 m to 1.15 m. Ideal with the FTA or DST adapter.

**Article no. 975718**

## 2 TRI 105 Tripod

Quality tripod with bubble level, very easy fine adjustment. Extendable length from 0.67 m to 1.80 m.

**Article no. 975728**

## 3 TRI 120 Tripod

Twist locks for the legs make this tripod even more stable. The 180° foldable legs make it fully 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

Very rugged but lightweight aluminium tripod with ¼" fixing screw, bubble level and clamp for easy mounting. Can be extended from 0.75 m to 1.15 m. Ideal with Leica FTA 360 or FTA 360-S.

**Article no. 828426**

## 5 FTA360 Adapter

Sturdy adapter with fine drive for convenient and precise targeting. The adapter eases the task of targeting, especially over long distances, and minimises discrepancies when taking indirect measurements. For use in combination with Leica TRI 75, TRI 105, TRI 120 and TRI 200 tripods.

**Article no. 799301 for Leica DISTO™ D5**

## 6 DST 360 and DST 360-X Adapter

The smart adapter turns the Leica DISTO™ X3 or X6 into a DISTO™ station. It enables P2P measurements with the device or even becomes a real planning tool together with the Leica DISTO™ Plan app.

**Article no. 848783 adapter DST 360 with Tri 120 in rugged case for DISTO X3**

**Article no. 946095 adapter DST 360-X for DISTO™ X6**



## 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 Leica metaBox

Extremely robust case for storing, protecting and transporting the DISTO™ X6, DST 360-X adapter and TRI 120 Tripod.

**Article no. 962211 Leica metaBox 165L**

**Article no. 983878 Leica metaBox inlay for use with DISTO X6**

**Article no. 979673 mounting plate for metaBOX**

**Article no. 979672 adapter plate for other systems**

## 13 GLB30 Super Light Laser Visibility Glasses 3 in 1

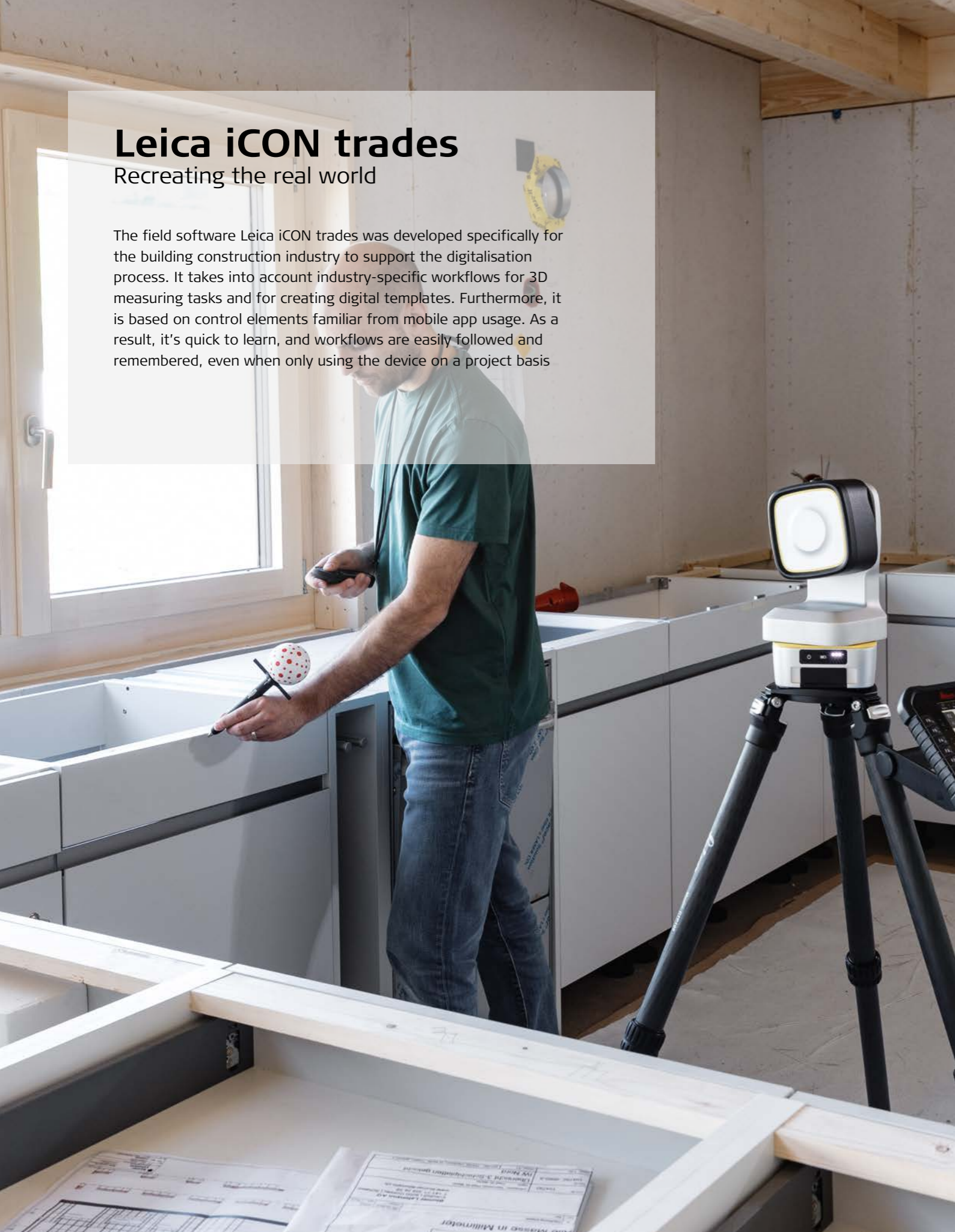
With three different lenses: laser visibility glasses, safety glasses and sunglasses. Red lens glasses for improved visibility of the laser dot in bright rooms and outdoors up to 10–15 m.

**Article no. 780117**

## Leica iCON trades

Recreating the real world

The field software Leica iCON trades was developed specifically for the building construction industry to support the digitalisation process. It takes into account industry-specific workflows for 3D measuring tasks and for creating digital templates. Furthermore, it is based on control elements familiar from mobile app usage. As a result, it's quick to learn, and workflows are easily followed and remembered, even when only using the device on a project basis



## Leica iCON trades for Templating

Software to create digital templates and data for CNC machinery

The field software Leica iCON trades for Templating is particularly suitable for the creation of digital templates and covers the specific needs of stonemasons, glaziers, bathroom fitters, and marine interior professionals. The software ensures a seamless workflow, from capturing 2D and 3D measurement data, to the completion of drawings on site and to the transfer of CNC-ready files directly to production.



### Advantages at a glance

- One-person operation reduces staff resources and increases productivity
- Quickly ready for use due to the 'auto-setup' process
- Easy relocation with 'auto-relocation' and Leica vTarget
- Fast and efficient data capturing, fully compatible with the unique wireless Leica vPen
- Finalisation of drawings on site with powerful CAD tools
- Export of production-ready DXF files to programme CNC machinery

### This software is compatible with:

- The Motorised Construction Tool – Leica iCON iCS20
- The Robotic Construction Tool – Leica iCON iCS50 & Leica vPen

Get more out of your construction data by collaborating with our leading software partners.



# Leica iCON trades for Interior Finishing

Software for measuring and marking tasks in interior construction

The field software Leica iCON trades for Interior Finishing ensures a seamless data flow, by enabling you to create as-built drawings including all details and then export the data for further processing in your preferred CAD software. The CAD design then allows you to programme your CNC machine and manufacture the individual components to fit precisely. This cuts down the assembly effort on site, as rework is reduced to an absolute minimum and the high-precision fit immediately fulfils professional aesthetic expectations



## Advantages at a glance

- One-person operation reduces staff resources and increases productivity
- Quickly ready for use due to the 'auto-setup' process
- Easy relocation with 'auto-relocation' and Leica vTarget
- Efficient data capturing due to automated measurement processes such as line and area scans
- Export to 2D/3D DXF or DWG files for further processing in CAD applications
- Clear documentation with automatically generated photos
- Projection of fixing points reduces assembly time on site

## This software is compatible with:

- The Motorised Construction Tool – Leica iCON iCS20
- The Robotic Construction Tool – Leica iCON iCS50 & Leica vPen

Get more out of your construction data by collaborating with our leading software partners.



# Leica iCON iCS20

Motorised Construction Tool

The Leica iCON iCS20 is an easy-to-use 3D measurement tool, serving a wide variety of professional applications. It is also suitable for users who want to move from traditional, manual measurement methods to digital workflows. The visual measurement technology always displays the current situation and prevents anything from being forgotten. Automated workflows, as well as the intuitive, industry-specific software Leica iCON trades, reduce measurement complexity to a minimum.

Yes, it's that simple.



Leica iCON iCS20 – Laser Interior Finishing Package

**Art. No. 6018483**

Leica iCON iCS20 – Laser Templating Package

**Art. No. 6018485**

## The Leica iCON iCS20 kit contains:

- Leica iCON iCS20
- Leica iCON trades for Interior Finishing software\*
- Leica iCON trades for Templating software\*\*
- Charger for indoor use
- Leica CSX8 tablet incl. pouch
- GZM3 target plate
- vTarget plates incl. stands
- vTarget stickers
- Carry case
- Leica CTP108 Carbon tripod incl. quick mount

\* Interior Finishing package only

\*\* Templating package only





## Leica iCON iCS50

### Robotic Construction Tool

The robotic Leica iCON iCS50 is the state-of-the-art construction tool to perform both simple and complex 2D and 3D measurement tasks. It is characterised by the same features as the Leica iCON iCS20. However, in combination with the smart accessory Leica vPen – the unique wireless measuring pen – it becomes a very productive solution, as the time required for measurement tasks, as well as the risk of errors, is reduced to a minimum.

**Yes, it's that simple.**



Leica iCON iCS50 – vPen Templating Package  
**Art. No. 6018486**

Leica iCON iCS50 – vPen Interior Finishing Package  
**Art. No. 6018484**

#### The Leica iCON iCS50 kits contain:

- Leica iCON iCS50
- Leica iCON trades for Templating software\*
- Leica iCON trades for Interior Finishing software\*\*
- Leica vPen
- Charger for indoor use
- Leica CSX8 tablet incl. pouch
- RC10 remote control
- GZM3 target plate
- vTarget plates incl. stands
- vTarget stickers
- Carry case
- Leica CTP108 Carbon tripod incl. quick mount

\* Templating package only

\*\* Interior Finishing package only



## Leica vPen

### The unique wireless measuring pen for tactile measurements

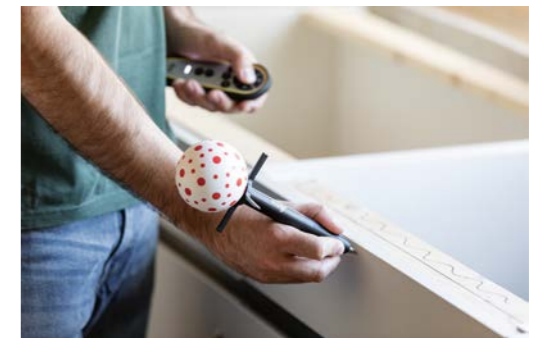
This unique wireless measuring pen is very versatile and extremely precise ( $\pm 1$  mm accuracy at 10 m). You can use it to measure on any surface, including glass. The unique visual-based target tracking ensures that the Leica iCON iCS50 always stays connected to the Leica vPen.

**Yes, it's that simple.**



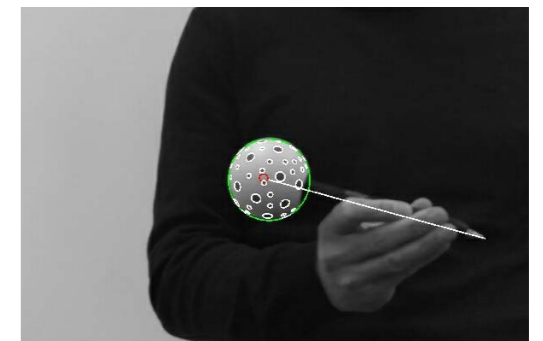
#### Leica vPen – Even More Convenience and Accuracy

This unique wireless measuring pen is very versatile and extremely precise. Simply touch the point to be measured and it is captured. Hidden points, glossy surfaces or even glass are not a limitation and setting up target plates on edges is no longer necessary.



#### Visual Measurement Technology

The sensor's camera picture constantly observes the sphere of the Leica vPen with its unique dot pattern and precisely calculates its position from any direction, accounting for tilt and orientation. This process is extremely fast, ensuring a consistently robust connection between sensor and sphere.



# 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.



20-25 Leica Lino Family

## Leica Lino Family

Excel on every point across the whole range

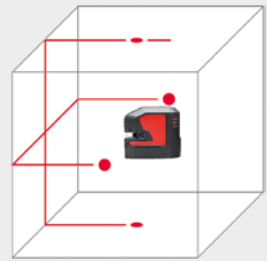


### Leica Lino L2P5

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 allows you 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**



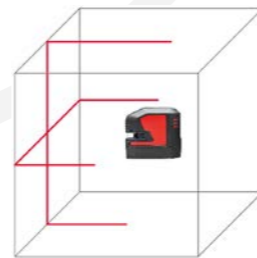
### Leica Lino L2

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**

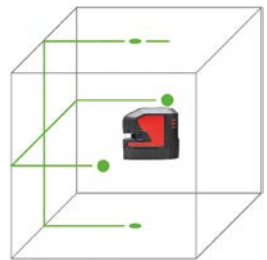


### Leica Lino L2P5G

Multi-functionality with highest visibility

The point and crossline 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 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 you to work faster and more precisely.

**Article no. 912932**

**Article no. 864420 set incl. Li-ion battery and UAL 130 adapter in carrying case**

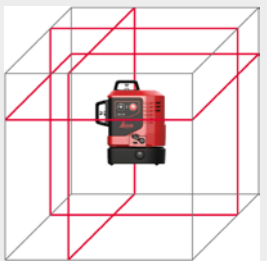


### Leica Lino L6R

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  $\pm 10^\circ$ .

**Article no. 918976 Lino L6R**

**Article no. 912969 set incl. Li-ion battery and UAL 130 adapter in carrying case**

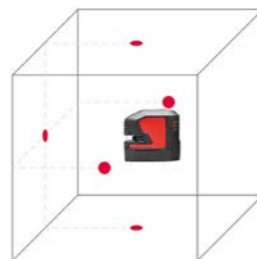


### Leica Lino P5

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 you to quickly attach the Leica Lino P5 to edges, profiles, iron pipes, tracks or bars.

**Article no. 864427 set in carrying case**

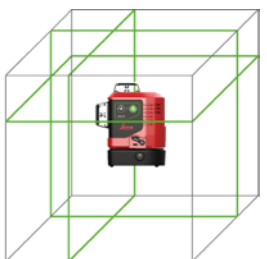


### Leica Lino L6G

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 Lino L6G**

**Article no. 912971 set incl. Li-ion battery and UAL 130 adapter in carrying case**



# Leica Lino Family

## Highlights



### Excellent Laser Line Visibility

The excellent visibility and high accuracy of our red and green lasers result from the use of high-quality laser diodes. This enables razor-sharp laser lines with a long range and high levelling accuracy, ideal for levelling and alignment tasks. The Leica Lino devices use a class 2 visible laser, which makes them easy to use by any professional.

### Intelligent Power Supply Concept

The Leica Lino cross line and point lasers can be operated with rechargeable Li-ion or alkaline batteries or connected directly to the power supply. This concept ensures uninterrupted and efficient operation in the daily construction site routine.

### Magnetic Adapters - Fast Positioning

The Leica Lino lasers are attached without screws to precise adapters with strong magnets, enabling quick and accurate set-up. The magnetic adapters fit into U-profiles and with the additional Leica UAL 130 adapter, the lasers can be easily attached to ferromagnetic structures. Ideal for ceiling installations, reference height transfer and drywall installations in large rooms.

### Safety First

Multiple redundant monitoring systems for the laser power and zero fault tolerance in case of technical defects or control failures – as they might appear with defective or damaged components – will result in automatic laser shutdown. This minimises the risk of strong damaging glare.

### Constant High Quality

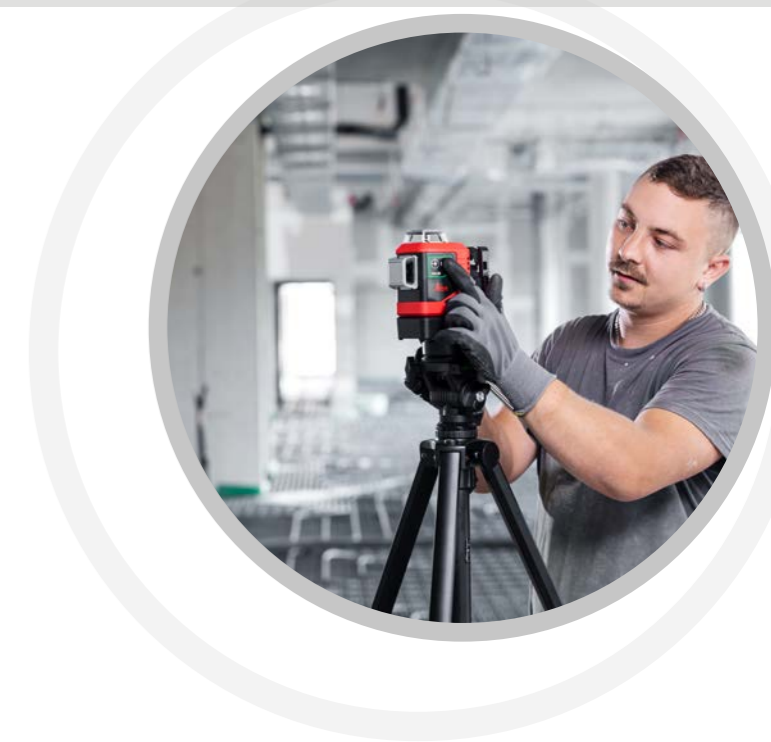
Various tests, such as material, storage and operational lifetime tests, ensure reliable and accurate results, not only under laboratory conditions, but also in the rugged everyday work environment of the construction site.

### Robust Design

The Leica Lino lasers are made of high-quality materials, such as glass fibre-reinforced plastic, have optics in a robust aluminium frame and shock-absorbing rubber components to protect against vibrations. With protection class IP54, they are ideal for dusty and humid construction sites and deliver precise results over the long term.

# Leica Lino Family

## Technical data



| Technical Data           | Lino L2s  | Lino L2                               | Lino L2Gs        | Lino L2G                              | Lino P5                        | Lino L2P5                             | Lino L2P5G                                  | Lino L6Rs        | Lino L6R   | Lino L6Gs                             | Lino L6G                              |  |
|--------------------------|---|---------------------------------------|------------------|---------------------------------------|--------------------------------|---------------------------------------|---|------------------|--|---------------------------------------|---------------------------------------|--|
| Range*                   | 25 m  | 25 m                                  | 35 m             | 35 m                                  | 30 m                           | 25 m                                  | 35 m  | 25 m             | 25 m   | 35 m                                  | 35 m                                  |  |
| Smart Targeting          | -   |                                       |                  |                                       |                                |                                       |   |                  |  |                                       |                                       |  |
| Levelling accuracy       | ±0.2 mm/m   |                                       |                  |                                       |                                |                                       |   |                  |  |                                       |                                       |  |
| Self-levelling range     | ±4°   |                                       |                  |                                       |                                |                                       | ±4°   |                  |  |                                       |                                       |  |
| Dot accuracy             | -   |                                       |                  |                                       | ±0.2 mm/m                      |                                       |   |                  | -  |                                       |                                       |  |
| Horizontal line accuracy | ±0.3 mm/m   |                                       |                  |                                       | -                              |                                       | ±0.3 mm/m                                   |                  | ±0.3 mm/m  |                                       |                                       |  |
| Vertical line accuracy   | ±0.3 mm/m   |                                       |                  |                                       | -                              |                                       | ±0.3 mm/m                                   |                  | ±0.3 mm/m  |                                       |                                       |  |
| Beam direction           | vertical, horizontal  |                                       |                  |                                       | up, down, forward, right, left |                                       | vertical, horizontal, up, down, right, left |                  | 1 x 360° vertical front, 1 x 360° vertical side, 1 x 360° horizontal |                                       |                                       |  |
| 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                      |                                       |  |
| 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)       | 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) |  |
| 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 25 h (AA)  | up to 36 h (Li-ion)  | up to 11 h (Li-ion)                   | up to 11 h (Li-ion)                   |  |
| Weight with batteries    | 500 g   | 530 g                                 | 500 g            | 530 g                                 | 495 g                          | 530 g                                 | 530 g                                       | 751 g            | 781 g  | 781 g                                 | 781 g                                 |  |
| Warranty                 | 2 years warranty<br>3 years warranty after registration on <a href="http://www.disto.com">www.disto.com</a> |                                       |                  |                                       |                                |                                       |   |                  |  |                                       |                                       |  |

\* 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. Localises 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.

**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.

**Article no. 866090**

## 3 UAL 130 Wall Mount

The universal adapter for Lino allows you 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**

## 4 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**



## 5 TRI 75 Tripod

The small portable tripod is intended for everyday use. Its features include easy fine adjustment and a bubble level. Extendable length from 0.42 m to 1.15 m.

**Article no. 795718**

## 6 TRI 105 Tripod

Quality tripod with robust tilt head, quick release and flip levers, for fast and smooth adjustment. Extendable length from 0.67 m to 1.80 m. Compatible with DISTO™ and Lino.

**Article no. 975728**

## 7 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. 834534 (for red lasers)**

**Article no. 772796 (for green lasers)**

## 8 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. 913012 for L6R and L6G**

## 9 Drop protector for Lino devices

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

**Article no. 921250**

# Construction Lasers

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

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 Leica Rugby CLAx / CLH Grade Lasers you can get your device configured to match your application needs. The maximum flexibility and the ability to quickly adjust to the job's needs is vital for your projects.



**28-33** Leica Rugby CLAx / CLH Grade Lasers



**34-37** Leica Rugby 600 Series



**38-39** Leica Piper Series



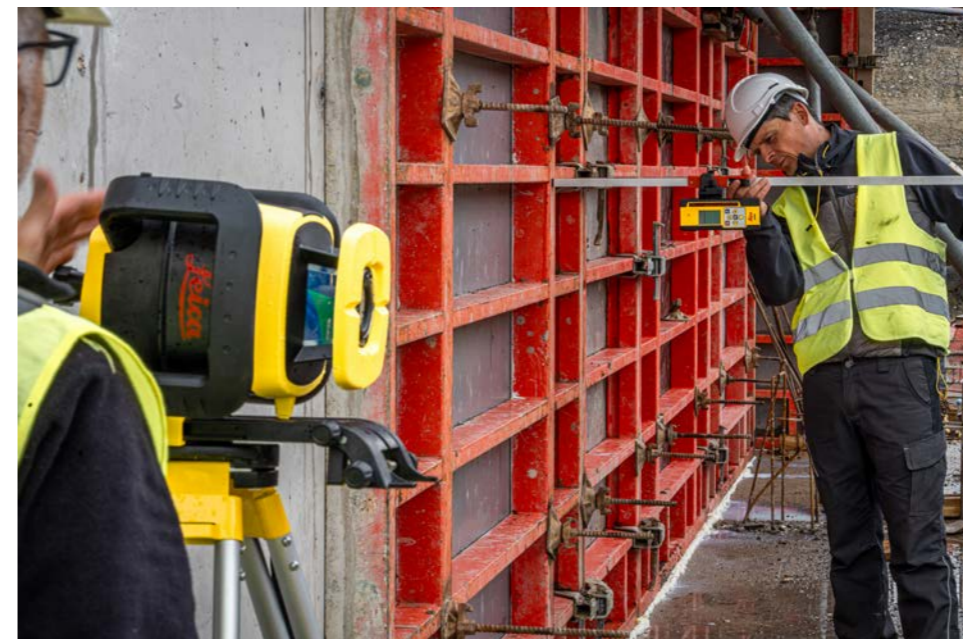
**40-41** Machine Receivers

# Leica Rugby CLAx

With a streamlined portfolio your application needs are met as the CLAx series provides the laser you need to maximise productivity and performance on-site. The three models deliver unmatched performance in any levelling, aligning, and squaring tasks, making it a real all-rounder.

## Rugby CLAx packages including battery, charger and carrying case

| Article | Description                              |
|---------|--|
| 6018539 | Rugby CLAx250, manual grade              |
| 6018541 | Rugby CLAx550, manual grade, lay down    |
| 6018543 | Rugby CLAx700, auto dual grade, lay down |



# Leica Rugby CLH

With the unique capability to adapt to any application needs through software upgrades and onboard operation, the Leica Rugby CLH is an upgradable laser to maximise productivity and performance on-site. The upgrade options deliver unmatched performance in any levelling, aligning, and squaring tasks, making it a real all-rounder.

## Basic Instrument including battery, charger and carrying 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                |
| 6018678 | Rugby CLH & CLX001A, semi auto grade, 20 rps (1200 rpm) |

Combo required for all packages





| LEICA RUGBY                            | CLH  | CLA-CTIVE  |
|--|--|--|
| Warranty                               | 5Y / 2Y knockdown                                      | 5Y / 2Y knockdown                                      |
| Grade capability* (X/Y Axes)           | 8%   | 15%  |
| Self-levelling accuracy**              | ±1.5 mm at 30 m<br>(±1/16" at 100 ft)                  | ±1.5 mm at 30 m<br>(±1/16" at 100 ft)                  |
| Self-levelling range                   | ±6°  | ±6°  |
| Operating range with Combo, RE 140/160 | 1,350 m diameter                                       | 1,350 m diameter                                       |
| Remote range                           | 600 m diameter   | 600 m diameter   |
| Laser class                            | 1  | 2  |
| Environmental standard                 | IP68 / MIL-STD-810G                                    | IP68 / MIL-STD-810G                                    |
| Operating temperature                  | -20 °C to +50 °C<br>-4 °F to +122 °F                   | -20 °C to +50 °C<br>-4 °F to +122 °F                   |
| Storage temperature                    | -40 °C to +70 °C<br>-40 °F to +158 °F                  | -40 °C to +70 °C<br>-40 °F to +158 °F                  |
| Rotation speed                         | 10 RPS   | 0, 2, 5, 10, 15 RPS                                    |
| Batteries (Li-ion)                     | Li-ion   | Li-ion   |
| Battery operating time**               | 50 h   | 50 h   |
| Battery charging                       | 5 h (full charge)<br>1 h fast charge = 8 h operating   | 5 h (full charge)<br>1 h fast charge = 8 h operating   |
| Dimensions (H x W x D)                 | 230 mm / 9.1 in<br>296 mm / 11.7 in<br>212 mm / 8.3 in | 230 mm / 9.1 in<br>296 mm / 11.7 in<br>212 mm / 8.3 in |
| Weight with batteries                  | 3.8 kg / 8,4 lbs                                       | 3.8 kg / 8,4 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-ctive, CLH) - with built-in backlight.

| Article | Description              |
|---------|--------------------------|
| 986299  | 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 CL-Series)  
**Article no. 864849**
- 2 A100 Li-ion Charger**  
(for Rugby CL-Series)  
**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.



# 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   |
|------------------------------------|--|--|--|---|---|
| <b>Functionality</b>               | 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 |
| <b>Operating range (diameter)*</b> | 600 m / (1,970 ft)   | 600 m / (1,970 ft)                                     | 600 m / (1,970 ft)   | 400 m / 1300 ft   | 800 m / (2,600 ft)  |
| <b>Self-levelling accuracy</b>     | ±2.2 mm at 30 m  | ±2.2 mm at 30 m  | ±2.2 mm at 30 m  | ±2.2 mm at 30 m   | ±1.5 mm at 30 m   |
| <b>Self-levelling range</b>        |  |  | ±5°  |   |   |
| <b>H.I. elevation alert</b>        | ✓  | ✓  | ✓  | ✓   | ✓   |
| <b>Rotation speeds</b>             | 10 rps   | 10 rps   | 0, 2, 5, 10 rps  | 0, 2, 5, 10 rps   | 10 rps  |
| <b>Scanning modes</b>              |  |  | 10°, 45°, 90°  | 10°, 45°, 90°   |   |
| <b>Remote control / radius</b>     |  |  | RC400 / 200 m  | RC400 / 200 m   |   |
| <b>Laser diode type / class</b>    | 635 nm / Class 1   | 635 nm / Class 1                                       | 635 nm / Class 2   | 520 nm / Class 2  | 635 nm / Class 1  |
| <b>Dimensions (H x W x D)</b>      | 212 x 239 x 192 mm   |  |  |   |   |
| <b>Weight with battery</b>         | 2.4 kg   | 2.6 kg   | 2.6 kg   | 2.6 kg  | 2.6 kg  |
| <b>Batteries (rechargeable)</b>    | Li-ion pack (A600)   |  |  |   |   |
| <b>Battery life (rechargeable)</b> | 40 h @ 20 °C   |  |  |   |   |
| <b>Environmental standard</b>      | IP67   |  |  |   |   |
| <b>Operating temperature range</b> | -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  |
| <b>PROTECT service offering</b>    | Manufacturer's Warranty: Lifetime<br>No Cost period: 3 years |  |  |   |   |

\* Operating range can vary slightly depending on working conditions and Rod Eye used.

## Battery and Charging

### 1 A100 Li-ion Charger

(for Rugby CL-Series & 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 Laser 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** Rugby Scope with adapter plate for Rugby CLA / CLI  
Article no. 864859
- 7** Rugby Carrying case Flexible Name Tag  
Article no. 868138
- 8** RC400 Remote Control  
Operates with Rugby 640 / 640G.  
Article no. 790352
- 9** A240 Manual Slope Adapter  
Used with Rugby 610.  
Article no. 790434
- 10** A210 Ceiling Grid Target  
Used with Rugby 640.  
Article no. 732791
- 11** 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<br>Medium ±2 mm<br>Coarse ±3 mm |                     | Very fine ±0.5 mm<br>Fine ±1 mm<br>Medium ±2 mm<br>Coarse ±3 mm<br>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 Series

The world's most versatile pipe laser

Built with a rugged aluminum housing, these pipe lasers perform powerfully even in tough jobsite conditions. The Leica Piper is specifically designed to fit inside a 100 mm (4 inch) pipe.

And there is more... The Piper Green Series has 4 times better laser visibility for longer working distances while achieving higher accuracy while remaining the smallest pipe laser in the market.



### Piper 100 Package

Piper 100 in Carrying Case. Includes target, holder, remote control, 150 mm (6") Feet, Li-Ion Battery and Charger. Laser Class 3R.

Article no. 748704

### Piper 100 2M Package

Piper 100 with Laser Class 2M laser in Carrying Case. Includes target, holder, remote control, 150 mm (6") Feet, Li-Ion Battery and Charger. Laser Class 2M.

Article no: 853610

### Piper 100G Package

Piper 100G in Carrying Case. Includes target, holder, remote control, 150 mm (6") Feet, Li-Ion Battery and Charger. Laser Class 3R.

Article no. 6016058

### Piper 100G 2M Package

Piper 100G with Laser Class 2M laser in Carrying Case. Includes target, holder, remote control, 150 mm (6") Feet, Li-Ion Battery and Charger. Laser Class 2M.

Article no: 6016061

### Piper 200 Package with Alignmaster

Piper 200 in Carrying Case. Includes target, holder, remote control, 150 mm (6") Feet, Li-Ion Battery and Charger. Laser Class 3R.

Article no. 748710

### Piper 200G Package with Alignmaster

Piper 200G in Carrying Case. Includes target, holder, remote control, 150 mm (6") Feet, Li-Ion Battery and Charger. Laser Class 3R.

Article no. 6016958

|                                | PIPER100                             |        |          |          | PIPER200 |          |
|--------------------------------|--------------------------------------|--------|----------|----------|----------|----------|
|                                | 2M                                   | 3R     | 2M GREEN | 3R GREEN | 3R       | 3R GREEN |
| Laser beam color               | Red                                  |        | Green    |          | Red      | Green    |
| Wave length                    | 635nm                                |        | 520nm    |          | 635nm    | 520nm    |
| Laser class                    | 2M                                   | 3R     | 2M       | 3R       | 3R       | 3R       |
| Max. average radiant power     | 1.2mW                                | 4.75mW | 1.2mW    | 4.8mW    | 4.75mW   | 4.8mW    |
| Working range                  | < 200m/650 ft                        |        |          |          |          |          |
| Grade range                    | -10% to +25%                         |        |          |          |          |          |
| Self-levelling range           | -15% to +30%                         |        |          |          |          |          |
| Line movement                  | 6m at 30m / 20ft at 100ft            |        |          |          |          |          |
| Battery*                       | Li-Ion, up to 40h                    |        |          |          |          |          |
| Charging time*                 | 4h                                   |        |          |          |          |          |
| Operating temperature          | -20°C to +50°C / -4°F to +122°F      |        |          |          |          |          |
| Dimensions (diameter x length) | 96mm x 267mm / 3.9" x 10.5"          |        |          |          |          |          |
| Weight                         | 2.0Kg / 4.4lbs                       |        |          |          |          |          |
| Housing                        | Cast aluminium                       |        |          |          |          |          |
| Protection class               | IP68                                 |        |          |          |          |          |
| Wireless remote distance       | Front 150m / 500ft                   |        |          |          |          |          |
|                                | Back 10m / 35ft                      |        |          |          |          |          |
| Self levelling accuracy**      | +/-1.5mm at 30m / +/- 1/16" at 100ft |        |          |          |          |          |
| Auto targeting                 | No                                   |        |          |          | Yes      |          |

\* Battery operating/charging times are dependent upon environmental conditions  
 \*\* Self levelling accuracy is defined at 25°C/77°F

# Leica Piper Accessories

1 IR Remote Control

Article no. 746157

2 Target Assemblies

Article no. 915443

Article no. 725858

3 PTC Target Assemblies - 100 mm / 4 in

Article no. 815613 - red

Article no. 950336 - blue

4 Trivet Assembly

Article no. 746158

5 Scope and Mount Assembly

Article no. 746160



# Leica MC200 Depthmaster

Depth indication system

Available in USA and Canada only

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



| 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              | -                              |

# 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



# Optical Levels

Extreme robustness, high measurement precision at a highly 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.



**44** Leica NA300 Series



**45** Leica NA500 Series



**46** Leica NA700 Series



**47** Leica NA2 / NAK2

# Leica NA300 Series

Unique. Accurate. Simple.

The Leica NA300 Series of automatic (optical) levels were 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<br>No Cost period: 1 year |        |

# 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<br>No Cost period: 2 years |        |

# 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**

### 2 CLR104 Telescopic Level Staff

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

**Article no. 743420**

### 3 CLR102 Telescopic Level Staff

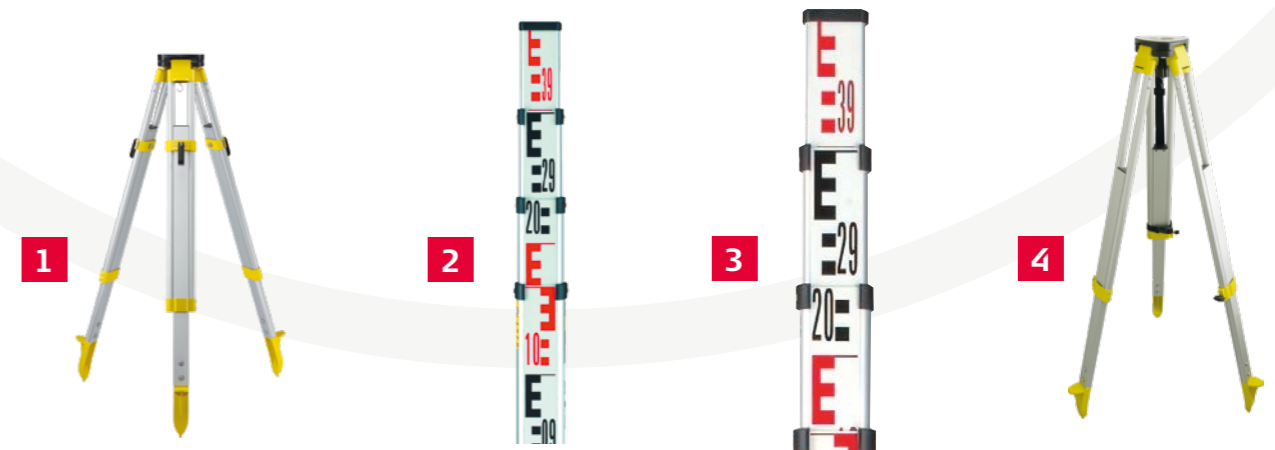
5 m length, 4 sections, E-graduation front, mm-graduation back. Complies with NA Levels

**Article no. 727588**

### 4 CT160 Tripod with screw clamps

CT 160 Tripod with screw clamps. Complies with NA Levels

**Article no. 864856**



# 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 continue 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

Automatic Level 20x telescopic magnification. The automatic level for all applications on the construction site.

Article no. 641982

### NA724

Automatic Level 24x telescopic magnification for improved accuracy. Reliability and robustness for the demanding construction user.

Article no. 641983

### NA730 plus

Automatic Level 30x telescopic magnification. The most precise. Meets the highest standards in construction, engineering and topographic surveys.

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<br>No Cost period: 2 years |        |            |

# 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 that meet all the requirements of precision levelling.



### NA2

Universal automatic level magnification 32x standard deviation per 0.7 mm (double-run levelling, depending on staff and technique).

Article no. 352036

### NAK2 (400gon)

Magnification: 32x Standard deviation per km 0.7 mm (double-run levelling, depending on staff and technique).

Article no. 352039

### NAK2 (360 degrees)

Same as before, but horizontal circle 360 degrees, optical scale interval 10', reading by estimation 1'.

Article no. 352038

| Technical Data                         | NA2  | NAK2  |
|--|--|---|
| Magnification                          | 32x<br>FOK73 eyepiece (optional): 40x                        | standard: 32x<br>FOK73 eyepiece (optional): 40x |
| Angle measurement                      | -  | 360° / 400 gon                                  |
| Standard deviation (per km double-run) | 0.7 mm/km<br>(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<br>No Cost period: 3 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



## Accessories

### 1 FOK73 40x Eyepiece

For NA2 / NAK2, exchangeable against standard eyepiece.

Article no. 346475

### 2 GPM3 Parallel-Plate Micrometer

In container, measuring range 10 mm.

Article no. 356121

### 3 GOA2 Autocollimation Eyepiece

For all instruments.

Article no. 199899







# iCON Construction Portfolio

Road, civil engineering, and building construction projects continue to become more demanding due to their complexity and increased pressure to complete everything correctly on time. Today's digital construction industry demands efficiency and quick decision-making to stay on track and minimise rework.

Leica iCON Construction Portfolio has you covered no matter where in the construction process you work. Our digital workflows increase speed, performance, and accuracy improving overall construction execution.



**50 Construction Software**



**56 Manual Total Stations**



**58 Robotic Total Stations**



**60 Leica AP20 AutoPole**



**62 Construction Layout Tools**



**66 Leica iCON Controllers**



**70 Leica iCON GNSS Sensors**

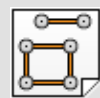
# Software solution for heavy construction

## Leica iCON site

The Leica iCON site software is a user-friendly tool designed for heavy construction tasks and aligns with the industries workflows and common practices. It simplifies your everyday jobs like measuring, stakeouts, as-built checks, and reporting. Designed with a customer-centric approach, it ensures your tasks are efficiently managed and executed, making your construction work smoother and more productive.



### Our customers' most favourite applications



Measure



Stakeout



Volumes & Surfaces



Cut & Fill



Rooding



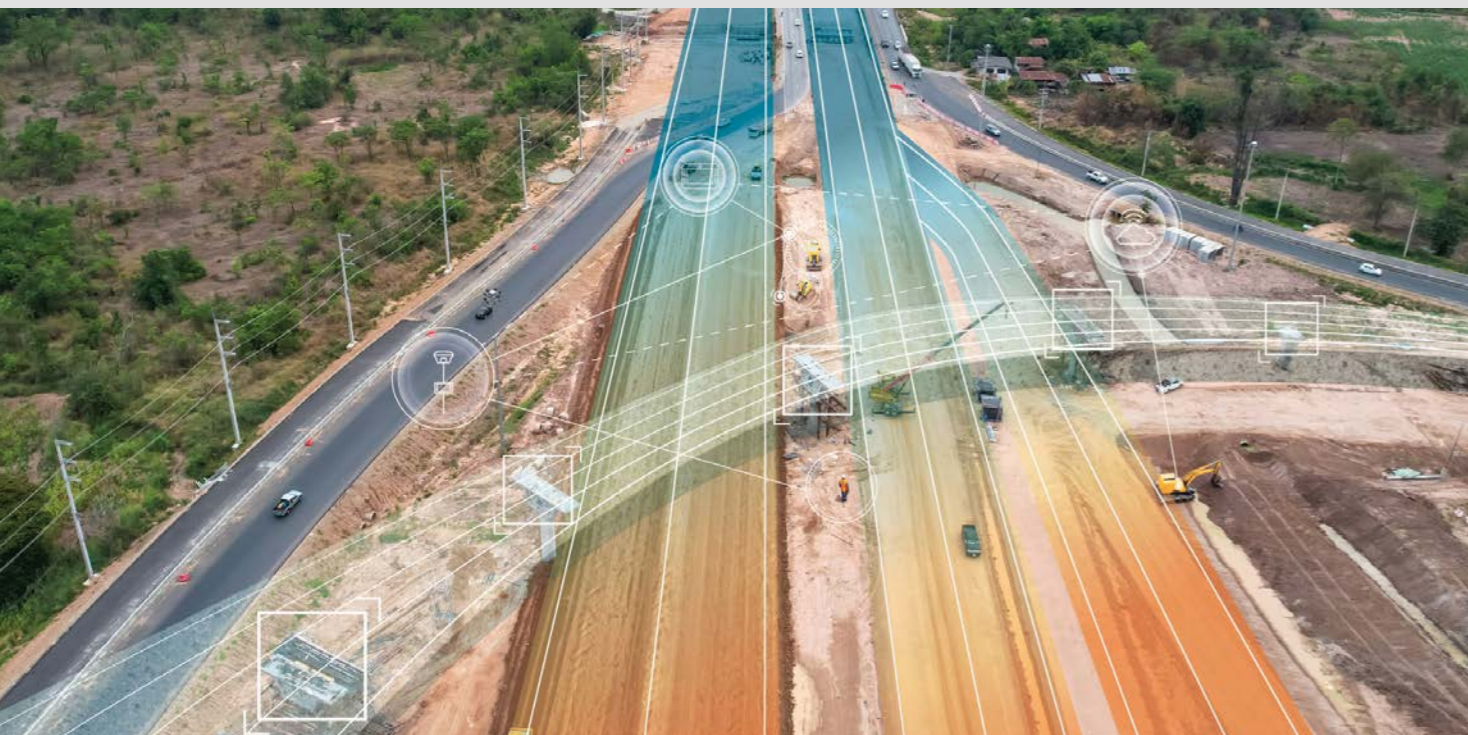
Slopes



Excavator



Milling



### Build with the user in mind!

Engineered with the user at its core, the Leica iCON site software aims to digitalise the most common construction workflows, delivering intuitive and robust solutions that transform the way our construction customers work onsite. Our constant updates and improvements demonstrate our commitment to empowering the heavy construction industry to achieve more efficient, productive and environmentally friendly operations.



### Foreman solution

The Leica iCON site software offers a foreman solution that helps site managers instantly increase site productivity by checking the efficiency of the machines and site personnel with an easy-to-use in-cab display (any Leica iCON field controller), make checks on whether your project is on time and on specification. With Leica iCON site you can carry out accurate as-built checks, stakeouts, grade checking, volume calculations and reporting.



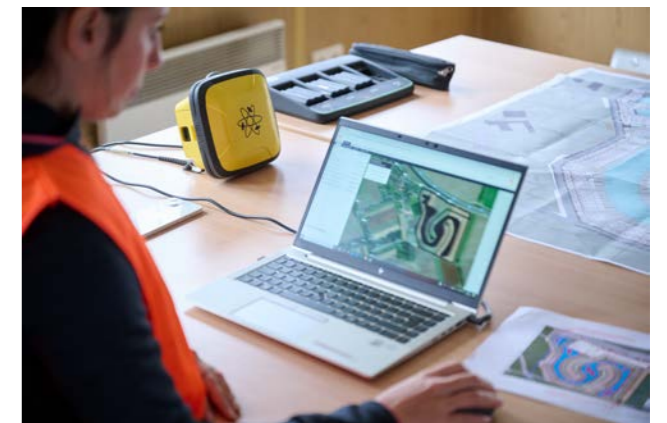
### Machine Productivity

The Leica iCON site software has expanded its functionality beyond traditional construction surveying tasks and serves as an easy tool for machine control and guidance applications. The iCON site excavator system is an optimal solution for optimising earthmoving jobs executed by compact excavators. Utilising one of the Leica iCON Smart Antennas, the iCON site milling application supports differential milling during road renovation works. Furthermore, the software provides entry-level machine guidance solutions for graders, dozers, and scrapers, for quick and accurate grading tasks.



### Cloud Connectivity

The distance between the office and the construction site is significantly bridged, thanks to Leica ConX and its cloud connectivity capabilities that benefit various individuals on site. It enables real-time data sharing, promoting faster and more precise decision-making for project and site managers. Meanwhile, cloud data storage mitigates the risk of data loss or downtime, providing both convenience and peace of mind. Work progress and reports are instantly available in the office, while construction workers can conveniently receive model updates within minutes.



# Software solution for building construction

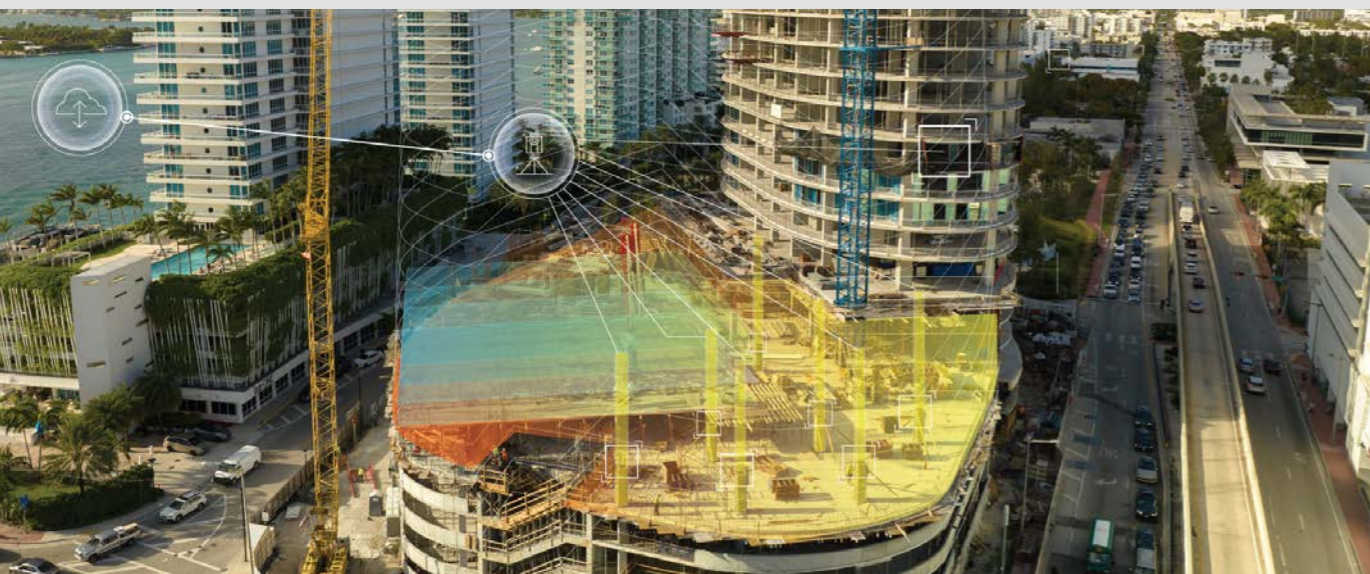
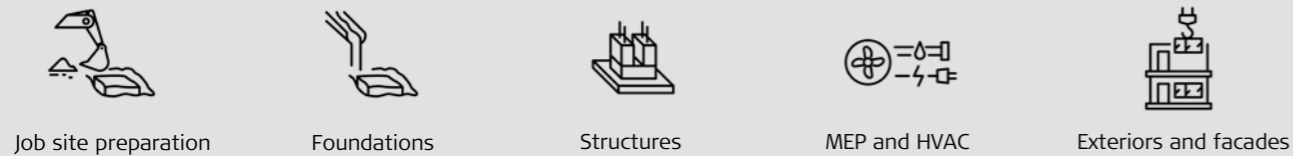
## Leica iCON build

Working in today's digital building construction industry demands efficiency and quick decision making to stay on track and minimise rework. Leica iCON build construction software provides versatility and flexibility for field crews to conduct layout, as-built and verification tasks on projects. Improve speed, performance and accuracy with just one custom built construction software.

Get more out of your construction data by collaborating with our leading software partners.



Optimised for the building construction industry, Leica iCON build is specifically designed to streamline digital layout, as-built updates and verification tasks, making it suitable for a diverse array of construction trades.



### Intuitive map views and in-field preparation

Leverage intelligent map controls on 2D, 3D, and BIM design data, coupled with Point Lists, File & Layer controls for efficient data management. These intuitive tools, enhanced with Split Screen and 3D graphics, provide secure decision making and clear data representation on construction site. For in-field data preparation, swiftly generate or adjust design data to reflect on-site changes, fostering immediate adaptability.

### Exceptional layout functionality

Simply and accurately layout points, lines and arcs from 2D, 3D and BIM File formats with optimised views and colour coded quality indicators and tolerance checks to ensure a fast and accurate layout every time.

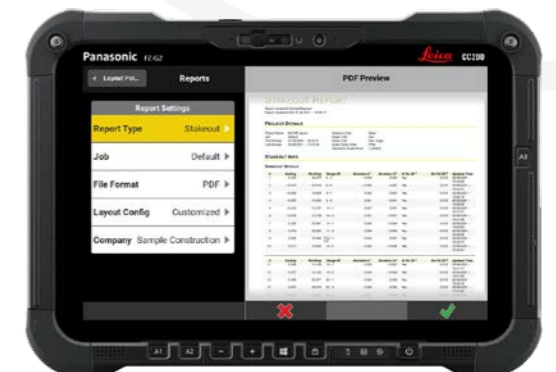
Enhance workflows further with inbuilt smart workflows to auto-stake layout positions for hangers, inserts, and wall penetrations.

### As-built and Checks

Capture points, lines or arcs in one step and store millimetre accurate 3D data for progress tracking and completion. Verify correct on-site placement of walls, formwork, columns, pipes, etc., for in-field decisions where all results are immediately visible within the map views.

### Reporting

Export accurate data based on true field results or application-based PDF reports for project progress tracking, documentation of existing conditions and necessary design updates.



# Leica iCON trades for Layout

Software for digital construction and MEP layout, as-built and inspection tasks



The field software Leica iCON trades for Layout is designed specifically for foremen, construction surveyors, layout specialists, MEP installers and drywallers. It follows the industry specific workflows and supports all layout and marking tasks carried out in the building construction industry. It is ideal for both simple layout tasks and complex projects. The handling is easy to learn and the device and software can be used immediately.



This software is compatible with:

- The Motorised Construction Tool – Leica iCON iCS20 & Leica CSX8 Android tablet
- The Robotic Construction Tool – Leica iCON iCS50 & Leica vPole & Leica CSX8 Android tablet

Get more out of your construction data by collaborating with our leading software partners.



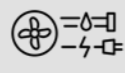
Optimised for the building construction industry, Leica iCON trades is designed to streamline digital construction and MEP layout, as-built and inspection tasks for a diverse array of construction trades.



Foundations



Structures



MEP and HVAC



Interior fitout



## Intuitive Operation

Leica iCON trades for Layout is a unique combination of simplicity and power. The software guides you through every step of the process, including data import and preparation, device positioning and layout. This allows you to layout faster and with ease.



## Fast Data Transfer on Site

Save the time-consuming data preparation in the office with a special office software. Simply import the data which you receive from the architecture, planning or surveying office into the Leica iCON trades software. All common file types will be accepted: PDF, CSV, DXF, DWG and IFC.



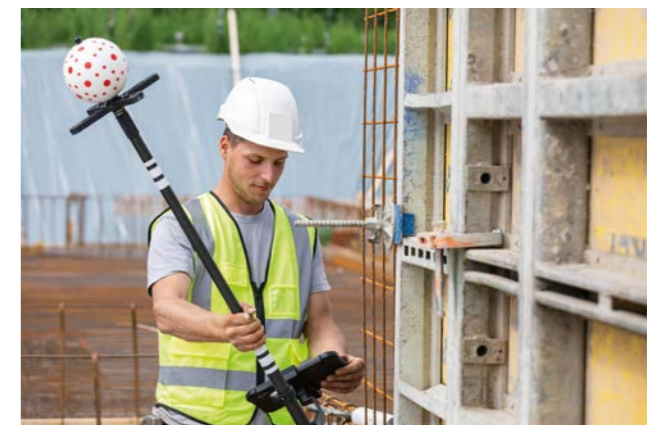
## Office to Field with Flexible Data Access

You can access the data either via USB, e-mail or common construction cloud services such as Bricsys 24/7, Autodesk Construction Cloud, Procore, Bluebeam, Allplan BIMPLUS, Google Drive, Dropbox, OneDrive. Always having the most recent data at hand enables you to react quickly to last-minute change requests with minimal efforts.



## Visual Measurement Technology

The visual measurement technology ensures that the device quickly recognises the unique pattern of red dots on the Leica vPole. It doesn't matter which direction you are moving it in, the Leica iCON iCS50 and the vPole remain securely connected at all times. This increases efficiency and avoids errors.



# 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

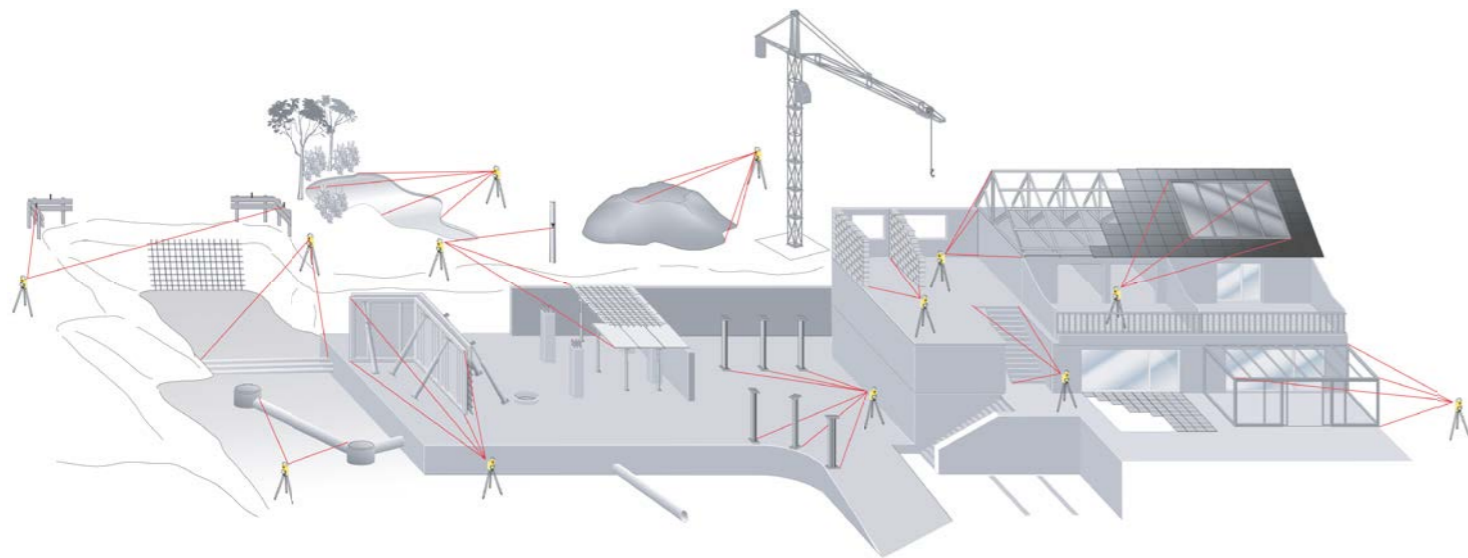
Leica iCON 2" iCB50 Manual Total Station & iCON build Field Software.

**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

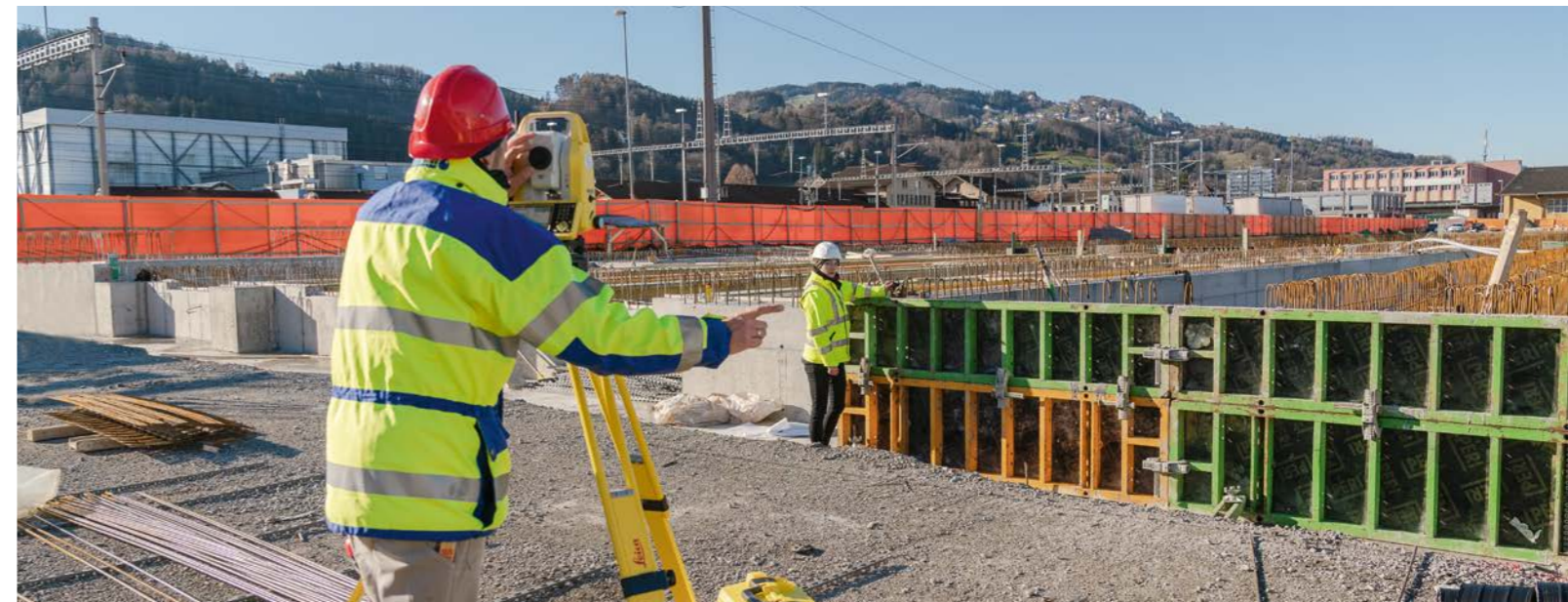
Leica iCON 1" iCB70 Manual Total Station & iCON build plus Field Software.

**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 & CC200 Tablet

Leica iCON 2" iCR70 Robotic Construction Total Station & iCON build Field Software & CC200 10" WIN Tablet.

**Article no. 6013419**

Leica iCON 2" iCR70 Robotic Construction Total Station & iCON site Field Software & CC200 10" 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.



iCR80

iCR80S

### Leica iCON iCR80 / iCR80S\*\* packages:

#### Kit with Leica iCON iCR80 / iCON build / CC200

Leica iCON 2" iCR80 Robotic Construction Total Station & iCON build Field Software & CC200 10" WIN Tablet.

**Article no. 6013433**

#### Kit with Leica iCON iCR80 / iCON site / CC200

Leica iCON 2" iCR80 Robotic Construction Total Station & iCON site Field Software & CC200 10" 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



# Leica AP20 AutoPole

Experience new heights in productivity with the world's smartest pole

Leica AP20 AutoPole is a revolutionary smart system for Leica robotic total station that solves three common workflow problems building and heavy construction professionals face daily:

- Total station locks to the wrong target.
- Points can be measured and stored with the wrong target heights.
- Time, effort and skill needed to ensure the pole is vertical while measuring and laying out.

The AP20 AutoPole enables faster and more reliable layout, as-builts and other measurement tasks, which are completed with less mistakes, minimising rework and delays.



### TargetID

The TargetID functionality makes sure that your total station is locked to your target and remains locked until your job is done.



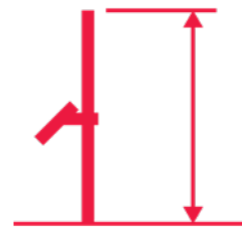
### LEICA AP20 AUTOPOLE VARIANTS

#### Article no. Description

|        |                  |
|--------|------------------|
| 922835 | AP20 H           |
| 922836 | AP20 ID          |
| 922837 | AP20 T           |
| 922838 | AP20             |
|        |                  |
| 913899 | CRP4 Metric Pole |
| 922838 | CRP5 Feet Pole   |

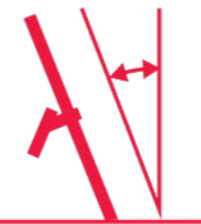
Use the Leica AP20 AutoPole in conjunction with:

- **iCON Field controllers** (running at least iCON field software 7.0): **CC170, CC180 and CC200**
- **iCON Robotic Total Stations** (connected to the iCON controller): **iCR70, iCR80S and iCR80**



### PoleHeight

The PoleHeight feature of the AP20 AutoPole automatically updates the correct pole height within the iCON field software every time you adjust your pole height.



### Tilt Compensation

Work smarter, not harder. The AP20 AutoPole tilt compensation provides flexibility to measure or layout points without the need to level the pole.



# Construction Layout Tools



## Leica iCON iCT30 Layout Tool for Construction

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.

**Leica iCON iCT30 & iCON build & CC170 Tablet**  
Leica iCON 9" iCT30 Construction Layout Tool & iCON build Field Software & CC170 7" WIN Tablet.  
**Article no. 6015039**

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 iCS20 Motorised Construction Tool

The Leica iCON iCS20 is an easy-to-use layout tool, serving a wide variety of professional applications. It is also suitable for users who want to move from traditional, manual layout methods to digital workflows. The visual measurement technology always displays the current situation and prevents anything from being forgotten. Automated workflows, as well as the intuitive, industry-specific software Leica iCON trades, also reduce measurement complexity to a minimum.

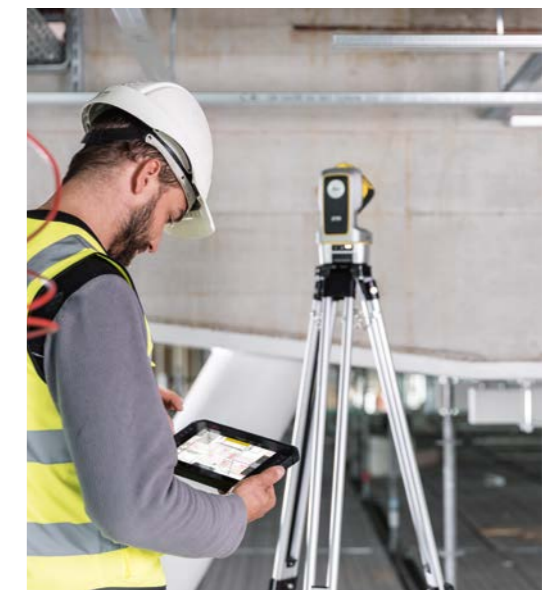
**Yes, it's that simple.**

Leica iCON iCS20 - Laser Layout Package  
**Art. No. 6018487**



**The Leica iCON iCS20 kit contains:**

- Leica iCON iCS20
- Leica iCON trades for Layout software
- Charger for indoor use
- Leica CSX8 tablet incl. pouch
- RC10 remote control
- GZM3 target plate
- vTarget plates incl. stands
- vTarget stickers
- Carry case including backstraps
- Leica wooden tripod
- Leica GAD122 quick mount adapter





# Leica iCON iCS50

Robotic Construction Tool

The robotic Leica iCON iCS50 is the state-of-the-art construction tool to perform both simple and complex layout tasks. It is characterised by the same features as the Leica iCON iCS20. However, in combination with the smart accessory Leica vPole, this becomes a very productive solution, as the time required for layout tasks, as well as the risk of errors, is reduced to a minimum.

**Yes, it's that simple.**



Leica iCON iCS50 - Robotic Layout Package

**Art. No. 6018488**

Leica iCON iCS50 - Robotic Layout Pro Package

**Art. No. 6018489**

### The Leica iCON iCS50 kits contain:

- Leica iCON iCS50
- Leica iCON trades for Layout software\*
- Leica iCON trades for Layout Pro software\*\*
- Charger for indoor use
- Leica CSX8 tablet incl. pouch and holder
- GZM3 target plate
- vTarget plates incl. stands
- vTarget stickers
- Carry case incl. backstraps
- Leica wooden tripod
- Leica GAD122 quick mount adapter
- Leica vPole incl. bipod\*
- Leica vPole incl. pole tilt compensation and auto-height\*\*

\* Layout package only

\*\* Layout Pro package only



# Leica vPole

The all-new layout experience with visual-based target tracking

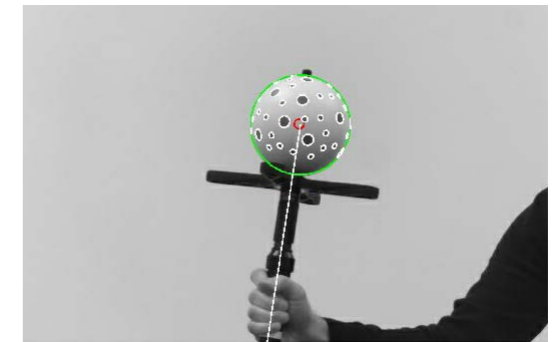
The unique visual-based target tracking is very robust and ensures that the Leica iCON iCS50 always stays connected to the Leica vPole. It also automatically compensates for pole tilt and automatically detects the pole height. This allows you to layout significantly more points, including hidden points. At the same time, the Leica vPole is very light and therefore comfortable to handle.

**Yes, it's that simple.**



### Visual Measurement Technology

The sensor's camera picture constantly observes the sphere of the Leica vPole with its unique dot pattern and precisely calculates its position from any direction, accounting for tilt and orientation. This process is extremely fast, ensuring a consistently robust connection between sensor and sphere.



### Unique Freedom of Movement

As the orientation of the sphere is recognised from any position, you can move freely around the construction site and walk directly towards your target without having to orientate yourself to the sensor. This is easier, faster and safer.



# Leica iCON Controllers



Robust, lightweight controllers for every construction site.

The Leica iCON portfolio has a range of field controllers to choose from, depending on your performance requirements, data volume and available budget. Regardless of your choice, each controller ensures a resilient, construction-tailored tablet with Windows 10 operating systems and the Hibernate mode for an efficient battery usage.

## Leica iCON CC200

A durable field controller designed for extended operation periods and scenarios demanding substantial data handling. It features a portrait mode for enhanced visibility, further catering to specific application needs.

Key features:

- Anti-reflective 10" screen
- Up to 12 hours operating time\*
- 16 GB RAM capacity
- Gloves and rain modes

\*May vary with environmental conditions, application and sensor used

### Article Numbers

Leica iCON CC200: 972082 – EU, 972084 – US/CA/MX, 972085 – JP, 972094 – KO, 972087 – CN, 972089 – AUS/NZ



## Leica iCON CC180

Sturdy field controller with powerful characteristics that combine compactness and performance. Ideal for construction professionals that execute daily construction surveying tasks.

Key features:

- 8" LCD screen
- Up to 8 hours operating time (pole use)\*
- Intel® 12th Generation processors
- Finger/rain, glove and stylus operation modes

\*May vary with environmental conditions, application and sensor used



### Article Numbers

Leica iCON CC180: 999243 – EU/AUS/NZ, 999244 – US/CA, 1000199 – JP

## Leica iCON CC170

Versatile, lightweight and small-sized field controller that weighs less than a kilo. Ideal for moderate data handling simple measuring and stakeout/layout tasks.

Key features:

- 7" sunlight-readable screen
- Up to 6 hours operating time\*
- Hot-swappable batteries
- Optional Long-range Bluetooth®

\*May vary with environmental conditions, application and sensor used



### Article Numbers

Leica iCON CC170: LTE Worldwide, 967017 LTE Worldwide with Long-range Bluetooth®



# Leica iCON GNSS Sensors

Construction GNSS Smart Antennas

## 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.
- HxGN Smartnet PPP - access to global PPP with no dependency on RTK coverage when working in remote areas and RTK bridging to fill interruptions.
- 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 & CC200 Controller & Pole Accessories.

**Article no. 6013901**

**iCON gps 70** GNSS SmartAntenna Performance Kit; includes iCG70 Performance Package & iCON site Field Software & CC200 Controller & Pole Accessories.

**Article no. 6013902**

**iCON gps 70 T** GNSS SmartAntenna Value Kit; includes iCG70 T Value Package & iCON site Field Software & CC200 Controller & Pole Accessories.

**Article no. 6013926**

**iCON gps 70 T** GNSS SmartAntenna Performance Kit; includes iCG70 T Performance Package & iCON site Field Software & CC200 Controller & Pole Accessories

**Article no. 6013927**

**iCON gps 70** GNSS SmartAntenna Value Kit; includes iCG70 Value Package & iCON build Field Software & CC200 Controller & Pole Accessories

**Article no. 6013935**

**iCON gps 70** GNSS SmartAntenna Performance Kit; includes iCG70 Performance Package & iCON build Field Software & CC200 Controller & Pole Accessories

**Article no. 6013936**

**iCON gps 70 T** GNSS SmartAntenna Value Kit; includes iCG70 T Value Package & iCON build Field Software & CC200 Controller & Pole Accessories

**Article no. 6013950**

**iCON gps 70 T** GNSS SmartAntenna Performance Kit; includes iCG70 T Performance Package & iCON build Field Software & CC200 Controller & Pole Accessories

**Article no. 6013951**

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



# Leica iCON gps 160

All-in-one and one for all

The Leica iCON gps 160 is the most versatile GNSS SmartAntenna for the construction industry, thanks to its flexibility on supporting you daily on various tasks on site. The iCON gps 160 features a large colour display with clear navigation steps that enables a quick and easy setup without additional hardware. And for customers that want to have it all, this SmartAntenna is also available with tilt compensation for even more convenience.

## Features:

- Integrated colour display for easy and fast setup
- Rugged aluminum housing and IP66 / IP68 protection for the harshest site conditions
- Latest RTK technology for fast initialisation and reliability
- SmartLink Fill to bridge RTK connection signal interruptions for up to 10 minutes
- New TR489-UHF radio that supports both 400 MHz and 900 MHz radio frequencies (USA/CAN only)
- Integrated global modem
- SmartGet Here, BasePilot, setup Wizard and other smart features
- Optionally available with calibration-free tilt compensation
- Seamless integration into iCON field solutions



## Article no.

- 954189 iCON gps 160 Smart Antenna LTE Value
- 954190 iCON gps 160 Smart Antenna LTE Performance
- 954192 iCON gps 160 Smart Antenna LTE Ultimate
- 954194 iCON gps 160 Smart Antenna LTE&Radio Base
- 954196 iCON gps 160 Smart Antenna LTE&Radio Value
- 954197 iCON gps 160 Smart Antenna LTE&Radio Perf.
- 954198 iCON gps 160 Smart Antenna LTE&Radio Ulti.

- 954205 iCG160 T Smart Antenna LTE&Radio Value
- 954206 iCG160 T Smart Antenna LTE&Radio Perf.
- 954208 iCG160 T Smart Antenna LTE&Radio Ulti.

# 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 CC170/CC180/CC200 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.

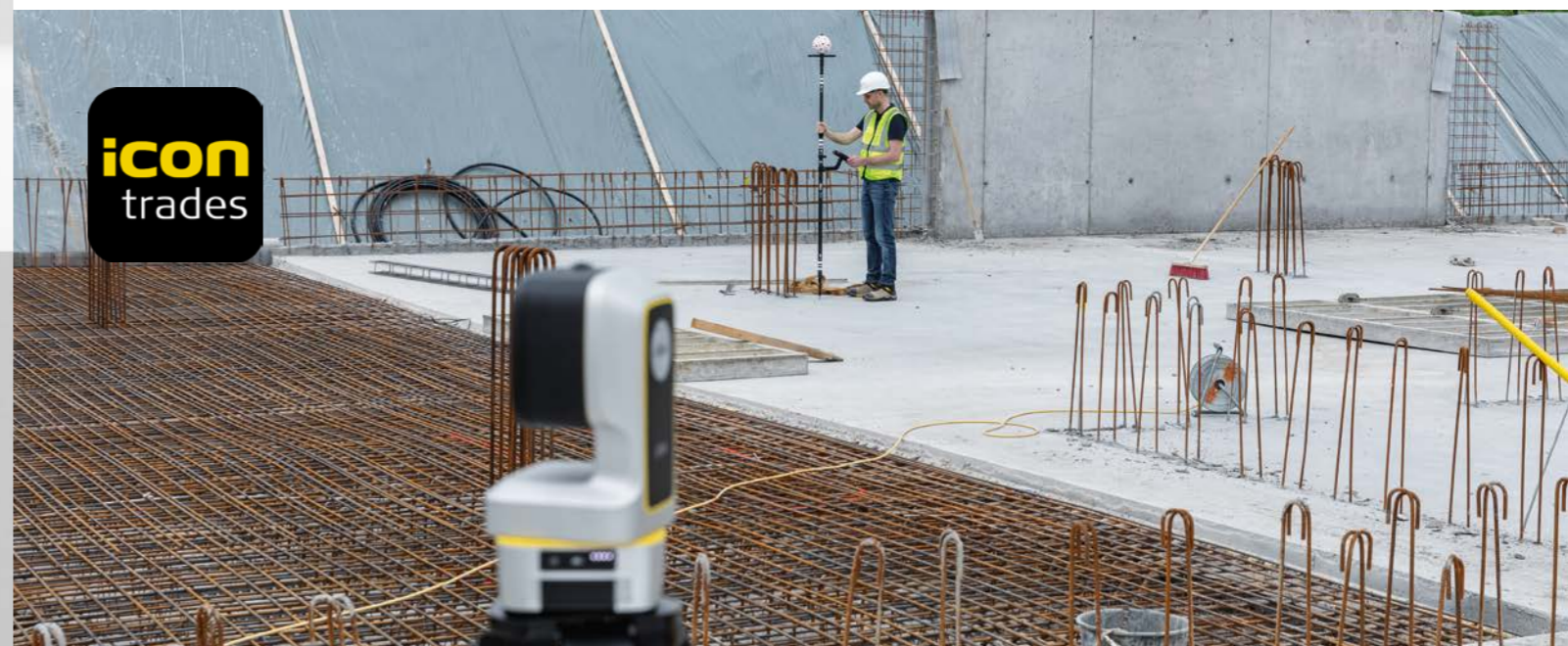
**Basic iCG30 Global Kit;** includes iCG30 & iCON site entry Software & CC170 Tablet PC & Pole Accessories

**Article No. 6015691**



# Leica iCON - Understanding Construction

The Leica iCON portfolio has been providing simplicity, durability, efficiency and construction-focused solutions for more than 10 years. We have been evolving our building and heavy construction offering to meet your changing needs on site. And we achieved this by understanding construction; understanding what it means to be in the field with you, day in, day out. The world may know us for our innovative solutions, but the thing we're most proud of building is trust.



# Detection systems

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



**78** Leica DSX



**80** Leica DS2000



**81** Leica ULTRA



**83** Leica DD300 Connect



**85** Leica DD100 Series

**86** DD and DA Accessories

# 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 the most reliable, simple and best workflow for utility detection and mapping. It has plug'n'play solution with positioning sensors and easy export to machine control, delivering instant 3D utility map and assuring the most productivity.



| Starter Kit   | Surveyor Kit   |
|---|--|
| <b>Article no. 6015139 Starter Kit DSX DXplore Perpetual</b> <ul style="list-style-type: none"> <li>DSX Utility Detection System</li> <li>CT1000 Controller</li> <li>DXplore Build (Perpetual)</li> <li>2yr DSX Basic CCP</li> <li>2yr DXplore Build CCP</li> </ul> | <b>Article no. 6015141 Surveyor Kit DSX DXplore Perpetual</b> <ul style="list-style-type: none"> <li>DSX Utility Detection System</li> <li>CT1000 Controller</li> <li>PS1000 pole support</li> <li>DXplore Build (Perpetual)</li> <li>DXplore Survey (Perpetual)</li> <li>2yr DSX Basic CCP</li> <li>2yr DXplore CCP (Build + Survey)</li> </ul> |
| <b>Article no. 6015140 Starter Kit DSX DXplore Subscription</b> <ul style="list-style-type: none"> <li>DSX Utility Detection System</li> <li>CT1000 Controller</li> <li>DXplore Build (one-year subscription)</li> <li>2yr DSX Basic CCP</li> </ul>                 | <b>Article no. 6015142 Surveyor Kit DSX DXplore Subscription</b> <ul style="list-style-type: none"> <li>DSX Utility Detection System</li> <li>CT1000 Controller</li> <li>PS1000 pole support</li> <li>DXplore Build and Survey (one-year subscription)</li> <li>2yr DSX Basic CCP</li> </ul>   |



## 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<br>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            |   | Build | Survey |
|--------------------|---|-------|--------|
| Setup              | Animation tutorials<br>Status check (connection, battery level, etc.)<br>Project and draft management<br>GNSS and TPS connection wizard<br>GNSS/TPS aided project and grid definition workflow  | ✓     | ✓      |
| Acquisition        | Grid Scan and Quick Scan mode<br>DSX cart precise alignment mode<br>Radar sensor control (scan and pause, etc.)   | ✓     | ✓      |
| Positioning        | Location from wheel encoders<br>Google Maps and current location support<br>Local coordinate system support<br>GNSS antenna and TPS support<br>Accuracy check in all screens<br>Geoid corrections   | ✓     | ✓      |
| Process & Analysis | On-site radar tomography generation<br>B-scan review and marking<br>3D tomography<br>POI support and Utility marking<br>Semi-automatic utility verification<br>Georeferencing with positioning data   | ✓     | ✓      |
| View               | Animation on tomography slices<br>2/3D view<br>Horizontal/Vertical scans<br>Contrast Slider<br>Back to utility<br>Lead to utility viewer  | ✓     | ✓      |
| Import             | Utility records in DXF, DWG and ESRI shape file<br>Multiple layer support   |       | ✓      |
| Export             | Customised Report in PDF format<br>Detected utilities in DXF format<br>Tomography in png, jpg, tiff, bmp, and gif format<br>3D DXF/DWG<br>Output in selected local coordinate systems<br>MCI (.lok supported)<br>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**



PS1500 Pole support  
(for positioning system)  
**Article no. 938361**

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**



DSX Transportation Case  
**Article no. 983719**





# 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. This will lower the risk of accidentally hitting underground assets. The DS2000 increases safety, speeds up the work process and lowers the asset management cost with the ability to prevent hazardous outages and collect more information. Making your business 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. With the ability of Intelligent signal processing, flexible operating modes and a range of accessories to provide optimum performance.

### Leica ULTRA Standard Locator

The Leica ULTRA is a precision utility tracing instrument configurable for extensive range of applications and allows for 100 customised 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<br>Sonde - ±5% to 3 m<br>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          |         |          |
| 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 DD300 Connect

Utility Locator Solution for all users, basic to expert

The Leica DD300 CONNECT utility locator solution allows basic to expert users in the detection of underground pipes with ease-of-use, speed and accuracy, to improve safety by mitigating risks associated with anyone who is working on construction sites.

Thanks to the integration with DX Shield suite, users can achieve an integrated and comprehensive understanding of site activities to analyse data, create reports on product use, configure and maintain the device.

### Main Features

- Bright LCD color screen with video tutorials
- Dual-power supply - Alkaline/Li-On batteries
- On-Off button for acquisition comfort
- Multiple acquisition frequencies, supporting the 3kHz frequency



## Leica DA300

1 Watt Signal Generator

The Leica DA300 simple and intuitive signal transmitter extends the applications and scope of the DD300 CONNECT cable locator, helping to improve the detection and tracing of buried utilities, even those with a poor or non detectable signal.

The Leica DA300 transmitter can be operated in both passive and active mode with the supplied accessories, such as the transmitter signal clamp, property plug connector and crocodile clamps.



### Software

For professionals looking to streamline utility locating operations, the Leica DD 300 CONNECT utility locator solution represents a single source solution.

DX Shield software provides a space for utility analysis and a convenient connection between locators to increase productivity and save time. DX Shield software allows you to gain a better understanding of task performance and site complexities with easy-to-use reports that provide a fast and convenient overview of product use, reducing utility strikes and saving direct repair costs and project downtime.



# Technical Specifications

| MODE                       | DD300 CONNECT   |
|----------------------------|---|
| Power                      | 50 / 60 Hz mains electrical and harmonics   |
| Radio                      | 15kHz to 60kHz  |
| Auto                       | Power, Radio, 33kHz   |
| Transmitter Modes          | 131.072 (131) kHz, 83.078 (83) kHz, 32.768 (33) kHz, 8.192 (8) kHz, 512 Hz, 640 Hz  |
| Depth Range                | Line 0.1m to 7m<br>4 inches to 23 feet<br>Sonde 0.1 to 10m<br>Sonde 4 inches to 32.8 feet   |
| Depth Accuracy*            | 5%  |
| Bluetooth                  | Class 2 BLE dual mode module<br>Bluetooth Classic 2.1<br>Bluetooth 4.0 (LE)   |
| GPS**                      | Chipset (1): u-blox®GPS<br>Receiver Type: GPS L1C/A, SBAS L1C/A, QZSS L1C/A, GLONASS L1OF, BeiDou B1<br>Accuracy (2): Horizontal Position 2.5 m<br>Autonomous, 2.0 m SBAS, CEP<br>Start time: Cold 45 s typical, Aided 7 s typical, Hot 1 s typical |
| Memory Capacity            | 8 GB internal memory  |
| Environmental Standard     | IP65  |
| Operating Temperature      | -20 °C to +50 °C / -4 °F to +122°F  |
| Battery                    | 4 X LR20 Alkaline Battery - Li-Ion as Optional  |
| Battery operating time *** | 10 h  |
| Dimensions (HxWxD)         | 765x290 x93mm / 30.12 x11.42x3.66 inches  |
| Weight with batteries      | 2.86Kg / 6.3 lbs  |

| MODE                               | DA300   |
|------------------------------------|---|
| Induction Mode Frequencies         | 32.768 (33) kHz / 8.192 (8) kHz   |
| Power Output                       | Up to 1 Watt max.   |
| Direct Connection Mode Frequencies | 131.072 (131) kHz / 83.078 (83) kHz / 32.768 (33) kHz / 8.192 (8) kHz / 512 Hz / 640 Hz |
| Environmental Standard             | IP67  |
| Operating Temperature              | -20 °C to +50 °C / -4 °F to +122°F  |
| Storage temperature                | -40°C to +70°C, / -40°F to +158°F   |
| Battery                            | 4 x LR20 Alkaline Battery - Li-Ion as optional  |
| Battery operating time **          | 15 h  |
| Dimensions (HxWxD)                 | 250 x 206 x 113 mm / 9.84 x 8.11 x / 4.45 inches  |
| Weight with batteries              | 2.46Kg / 5.42 lbs   |



# Leica DD100 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 pinpointing process improves the detection of utilities 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



## Leica DD175

With the latest DD175 locator take advantage of Bluetooth and GPS connection for sharing data with the existing DX Software Suite, for maximum efficiency and simplicity in your projects. Use the DD175 in conjunction with a DA175 signal transmitter or range of accessories to achieve improved accuracy and application scope.

Article no.



| Technical Data           | DD120                                    | DD130  | DD175  |
|--------------------------|--|--|--|
| Power                    | 50 Hz model or 60 Hz model               | 50 Hz model or 60 Hz model                     | 50 Hz / 60 Hz model                            |
| Radio                    | 15 kHz to 60 kHz                         | 15 kHz to 60 kHz                               | 15 kHz to 60 kHz                               |
| Auto                     | Power, Radio                             | 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 | 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                   | 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             | 0.3 m to 9.99 m / 1 ft to 32.77 ft             |
| Depth Accuracy*          | 10%                                      | 10%  | 10%  |
| Protection               | IP54                                     | IP54   | IP54   |
| 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             |
| Battery                  | 6 x LR6 (AA) Alkaline                    | 6 x LR6 (AA) Alkaline                          | 6 x LR6 (AA) Alkaline                          |
| Battery operating time** | 15 h                                     | 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       | 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                                 | 2.7 kg / 6 lbs                                 |
| Internal Data Storage    | -  | -  | ✓  |
| Data Logging             | -  | -  | ✓  |
| GPS                      | -  | -  | ✓  |
| Bluetooth                | -  | -  | ✓  |
| Warranty                 | 1 year                                   | 1 year   | 1 year   |

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

# DD and DA 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 |

## 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       |



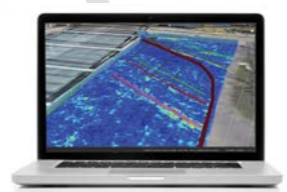
| Mode                               | DA175   |
|------------------------------------|---|
| Induction Mode Frequencies         | 32.768 (33) kHz / 8.192 (8) kHz   |
| Power Output                       | Up to 1 Watt max. when connected to a buried service with an impedance of 300 Ω |
| Direct Connection Mode Frequencies | 32.768 (33) kHz / 8.192 (8) kHz / 512 Hz / 640 Hz                               |
| Environmental Standard             | Cover Closed: IP67<br>Cover Open: IP65  |
| Operating Temperature              | -20 °C to +50 °C / -4 °F to +122°F  |
| Storage Temperature                | -40°C to +70°C, / -40°F to +158°F   |
| Battery                            | 4 x D alkaline (IEC LR20), supplied   |
| Battery Operating Time             | 30 hrs intermittent use at 20 °C / 68 °F  |
| Dimensions (HxWxD)                 | 250 x 206 x 113 mm / 9.84 x 8.11 x 4.45 inches                                  |
| Weight with batteries              | 2.5 kg / 5.5 lbs  |





# Detection Software and Services

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



**90** IQMaps Software



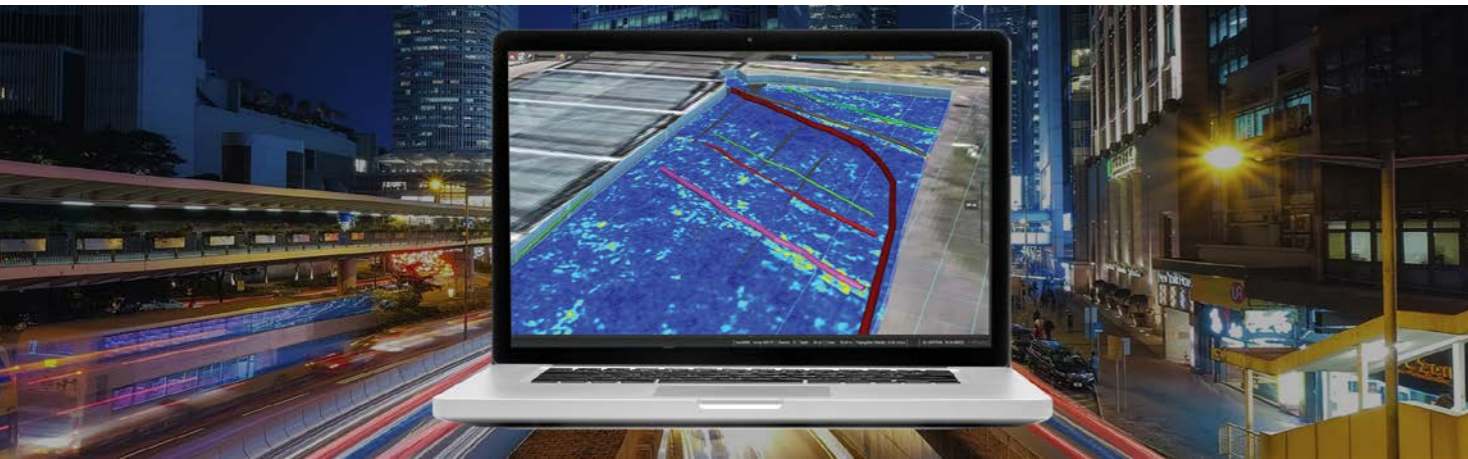
**91** DX Shield Software



**92** Leica Detection Campus

# IQMaps

The new frontier in GRP data analysis



IQMaps is a new post-processing software application for advanced GPR data analysis, which provides a fast interfacing between the user and the GPR data. Machine time has been reduced and, contemporarily, real-time processing and 3D visualisation have been introduced. It allows to easily process, analyse and inspect data from dense array radar systems. IQMaps provides a step by step approach to guide the user in performing the best and the quickest data analysis with the help of a customisable processing and analysis tool, both for skilled and not skilled users for utility mapping of large size projects, archaeological and environmental surveys.

IQMaps is available for Stream UP, Stream DP, Stream X, Opera Duo and RIS MF Hi-Mod.

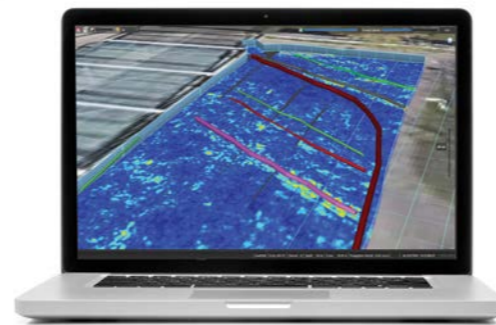
## IQMAPS MAIN FEATURES

- Ease of use and productivity have been dramatically increased (up to 20.000 sqm in a working day)
- Real-time processing and 3D immersive visualisation
- Responsive and intuitive interface with big amount of data

## IQMAPS BENEFITS

IQMaps is a game changer in terms of data visualisation speed and usability and data analysis because:

- Allows an immersive reality during post-processing phase
- There is no limit in software use even for acquisition of large areas
- Can process data from all Stream family

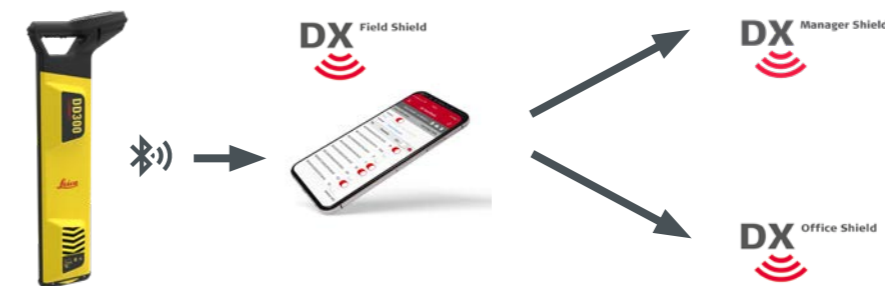


# DX Shield Software

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](http://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 most inexperienced 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)<br>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)<br>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

Send an email to [detection-training.geo@leica-geosystems.com](mailto: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.



### 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

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.

|         |                               |   |
|---------|-------------------------------|---|
| 5004725 | EML Tracing and Mapping       | Precision Locators Tracing and Mapping (2 days)<br>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)<br>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

Send an email to [detection-training.geo@leica-geosystems.com](mailto: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)<br>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)<br>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

Send an email to [detection-training.geo@leica-geosystems.com](mailto: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

With more than 200 years of history, Leica Geosystems, part of Hexagon, is the trusted supplier of premium sensors, software and services. Delivering value every day to professionals in surveying, construction, infrastructure, mining, mapping and other geospatial content-dependent industries, Leica Geosystems leads the industry with innovative solutions to empower our autonomous future.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 24,500 employees in 50 countries and net sales of approximately 5.4bn EUR. Learn more at [hexagon.com](http://hexagon.com) and follow us @HexagonAB



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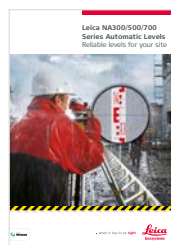
in accordance with IEC 60825-1\*

\* According to product specific technical details

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**Leica Rugby CLAx and CLH**  
The grade 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