Leica Geosystems
Construction Catalogue
Tools for any site
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 fulfill 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

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.

Leica Geosystems’ products fulfill 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.

No Cost Period:
Leica Geosystems’ products fulfill 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

Contents
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.

Laser Distance Meters

06–12 Leica DISTO™ Family

13–15 Leica 3D Disto
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.

Leica DISTO™ X3
Designed for tough, rugged conditions

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

Leica DISTO™ X4
Designed for bright, outdoor environments

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

Leica 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.

Leica D110
Small size, big possibilities

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

Leica 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.

Leica D510
Great outdoor functionality and apps

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

<table>
<thead>
<tr>
<th>Device</th>
<th>Typical accuracy</th>
<th>Range</th>
<th>Measuring units</th>
<th>Tilt sensor</th>
<th>Colour display with Pointfinder</th>
<th>Data interface*</th>
<th>Batteries</th>
<th>Dimensions</th>
<th>Weight with batteries</th>
<th>Memory</th>
<th>Laser class</th>
<th>Protection class</th>
<th>Warranty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leica DISTO™ S910</td>
<td>±2.0 mm</td>
<td>0.2 – 40 m</td>
<td>m, ft, in</td>
<td>360°</td>
<td>4x zoom</td>
<td>Bluetooth® Smart, Bluetooth® Smart</td>
<td>Type AAA 2 x 1.5 V</td>
<td>115 x 43.5 x 23.5 mm</td>
<td>87 g</td>
<td>10 results</td>
<td>Class 2</td>
<td>3.5 mm</td>
<td>3 years warranty</td>
</tr>
<tr>
<td>Leica DISTO™ D810 touch</td>
<td>±1.5 mm</td>
<td>0.2 – 60 m</td>
<td>m, ft, in</td>
<td>360°</td>
<td>4x zoom</td>
<td>Bluetooth® Smart, Bluetooth® Smart</td>
<td>Type AAA 2 x 1.5 V</td>
<td>120 x 37 x 23 mm</td>
<td>92 g</td>
<td>20 results</td>
<td>Class 2</td>
<td>3.5 mm</td>
<td>3 years warranty</td>
</tr>
<tr>
<td>Leica DISTO™ D10</td>
<td>±1.5 mm</td>
<td>0.05 - 100 m</td>
<td>m, ft, in</td>
<td>360°</td>
<td>4x zoom</td>
<td>Bluetooth® Smart, Bluetooth® Smart</td>
<td>Type AAA 2 x 1.5 V</td>
<td>116 x 44 x 26 mm</td>
<td>100 g</td>
<td>30 displays</td>
<td>Class 2</td>
<td>3.5 mm</td>
<td>3 years warranty</td>
</tr>
<tr>
<td>Leica DISTO™ D2</td>
<td>±1.0 mm</td>
<td>0.05 - 150 m</td>
<td>m, ft, in</td>
<td>360°</td>
<td>4x zoom</td>
<td>Bluetooth® Smart, Bluetooth® Smart</td>
<td>Type AAA 2 x 1.5 V</td>
<td>132 x 56 x 29 mm</td>
<td>184 g</td>
<td>30 displays</td>
<td>Class 2</td>
<td>3.5 mm</td>
<td>3 years warranty</td>
</tr>
<tr>
<td>Leica DISTO™ X3</td>
<td>±1.0 mm</td>
<td>0.05 - 200 m</td>
<td>m, ft, in</td>
<td>360°</td>
<td>4x zoom</td>
<td>Bluetooth® Smart, Bluetooth® Smart</td>
<td>Type AAA 2 x 1.5 V</td>
<td>143 x 58 x 29 mm</td>
<td>188 g</td>
<td>30 displays</td>
<td>Class 2</td>
<td>3.5 mm</td>
<td>3 years warranty</td>
</tr>
<tr>
<td>Leica DISTO™ X4</td>
<td>±1.0 mm</td>
<td>0.05 – 300 m</td>
<td>m, ft, in</td>
<td>360°</td>
<td>4x zoom</td>
<td>Bluetooth® Smart, Bluetooth® Smart</td>
<td>Type AAA 2 x 1.5 V</td>
<td>164 x 61 x 31 mm</td>
<td>198 g</td>
<td>30 displays</td>
<td>Class 2</td>
<td>3.5 mm</td>
<td>3 years warranty</td>
</tr>
<tr>
<td>Leica DISTO™ D510</td>
<td>±1.0 mm</td>
<td>0.05 – 200 m</td>
<td>m, ft, in</td>
<td>360°</td>
<td>4x zoom</td>
<td>Bluetooth® Smart, Bluetooth® Smart</td>
<td>Type AAA 2 x 1.5 V</td>
<td>238 g</td>
<td>290 g</td>
<td>30 displays</td>
<td>Class 2</td>
<td>3.5 mm</td>
<td>3 years warranty</td>
</tr>
</tbody>
</table>

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

## Overview

### Leica DISTO™ S910

Measure anything from anywhere

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

Article no. 805080

### Leica DISTO™ D810 touch

The smartest solution to measure and document

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

Article no. 792297

### Leica DISTO™ Family

Professional packages for each application

#### Leica DISTO™ X4 P2P-Package for outdoors

The Leica DISTO™ X-Series comes with the DISTO X360 adapter and the compact but sturdy tripod TRI 70. Everything is stored in a very robust case protected to IP67 standards. The DISTO™ X4 P2P-package is especially designed for outdoor Point-to-Point measurements, due to the digital Pointfinder camera of the DISTO™ X4.

Article no. 887891 (Leica DISTO™ X4 P2P-package for outdoors)

#### Leica DISTO™ S910 P2P-Package – the ultimate solution

This package is the complete ultimate solution for Point-to-Point measurements and creating drawings, which can be further processed in your preferred software. It includes the DISTO™ S910, the Leica FTA 360-S adapter, the Leica TRI 120 tripod, the Leica GWM3 target plate and the USB charger. Everything is stored in a very robust case protected to IP67 standards.

Article no. 887900

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

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

Article no. 823199

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

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

Article no. 806648
### Leica DISTO™ Family
Accessories supplied with / optional

<table>
<thead>
<tr>
<th><strong>1</strong></th>
<th>TRI 70 Tripod</th>
</tr>
</thead>
<tbody>
<tr>
<td>The small portable tripod is intended for everyday use. Its features include easy fine adjustment and a bubble level. Extendible length from 0.40 m to 1.15 m. Ideal with the FTA360 or FTA360-S adapter.</td>
<td></td>
</tr>
<tr>
<td>Article no. 794963</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>2</strong></th>
<th>TRI 100 Tripod</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality tripod with bubble level, very easy fine adjustment. Extendable length from 0.70 m to 1.74 m.</td>
<td></td>
</tr>
<tr>
<td>Article no. 757938</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>3</strong></th>
<th>TRI 120 Tripod</th>
</tr>
</thead>
<tbody>
<tr>
<td>Twist locks for the legs are making this tripod even more stable. The 180° foldable legs are making it ultimately compact. Ideal for any tripod adapter for all Leica DISTO™ models. Extendable length from 0.40 m to 1.20 m.</td>
<td></td>
</tr>
<tr>
<td>Article no. 848788</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>4</strong></th>
<th>TRI 200 Tripod</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable construction tripod with 1/4&quot; screw to use with DISTO™ on a FTA360 or FTA360-S adapter or Lino. Extendable length from 0.75 m to 1.15 m.</td>
<td></td>
</tr>
<tr>
<td>Article no. 828426</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>5</strong></th>
<th>FTA360 and FTA360-S Adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study adapter with fine drive for convenient and precise targeting. The adapter eases the task of targeting, above all over long distances, and result in minimum discrepancies when taking indirect measurements. For use in combination with Leica TRI 70, TRI 100, TRI 120 and TRI 200 tripods.</td>
<td></td>
</tr>
<tr>
<td>Article no. 828416 for Leica DISTO™ S910</td>
<td></td>
</tr>
<tr>
<td>Article no. 799301 for Leica DISTO™ DS10 and DB10 touch</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>5a</strong></th>
<th>LSA360-S Adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapter to have the laser beam aligned to the tilting axis when measuring angles and moving the Leica DISTO™ vertically. Works in conjunction with the Leica DISTO™ DB10 touch or Leica DISTO™ S910 and set up poles with diameters between 11-35mm.</td>
<td></td>
</tr>
<tr>
<td>Article no. 838704</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>6</strong></th>
<th>GZM26 Target Plate, large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grey side for short and brown side for long distance measurements. Size: 210 x 297 mm (A4).</td>
<td></td>
</tr>
<tr>
<td>Article no. 723385</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>7</strong></th>
<th>GZM27 Stick-On Target Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target plate held in place with kneading adhesive. Size: 45 x 100 mm.</td>
<td></td>
</tr>
<tr>
<td>Article no. 723774</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>8</strong></th>
<th>GZM320 Target Plate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stick-on target plates for placing on ground markers. Size: 274 x 197 mm.</td>
<td></td>
</tr>
<tr>
<td>Article no. 766560</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>9</strong></th>
<th>TPD 100 Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>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™.</td>
<td></td>
</tr>
<tr>
<td>Article no. 5012352</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>10</strong></th>
<th>POWERLINE 4 LIGHT Charger</th>
</tr>
</thead>
<tbody>
<tr>
<td>For charging 4 rechargeable batteries; type AA or AAA; with 4 adapters for worldwide use; including 4 rechargeable batteries AA / 2500 mAh.</td>
<td></td>
</tr>
<tr>
<td>Article no. 806679</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>11</strong></th>
<th>UC20 Universal Quick Charger</th>
</tr>
</thead>
<tbody>
<tr>
<td>For charging 2 rechargeable batteries; type AAA; with 4 adapters for worldwide use; Including 2 rechargeable batteries type Micro AAA NiMH / 800 mAh.</td>
<td></td>
</tr>
<tr>
<td>Article no. 788956</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>12</strong></th>
<th>GLB30 Super Light Laser Visibility Glasses 3 in 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>With three different lenses: laser visibility glasses, safety glasses and sun glasses. Red lens glasses for improved visibility of the laser dot in bright rooms and outdoors up to 10 – 15 m.</td>
<td></td>
</tr>
<tr>
<td>Article no. 780117</td>
<td></td>
</tr>
</tbody>
</table>
Leica DISTO™ Plan
Measuring requires documentation

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

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

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

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

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

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

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

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

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

Leica 3D Disto with 3D Disto software for Windows®

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

Customer Care PACKAGES »

Customer Care Package for 3D Disto
Benefit from online access to a network of support professionals who will work with you to solve any problems that may arise. Additionally get the latest software improvements and new features to keep your products up-to-date.
Article no. 6013493 (for one year)
Article no. 6013494 (for two years)
Article no. 6013495 (for three years)

Police

Customer Care Package for 3D Disto

Technical specifications

Distance in m

0.5 to 50 m / 1.7 to 165 ft

Range

10 m: ~7 mm x 7 mm
30 m: ~9 mm x 15 mm

Angle measuring range

Horizontal: 360°
Vertical: 250°

Self-levelling range tilt sensor

±3°

Digital pointfinder

1x, 2x, 4x, 8x zoom

File format

Import: DXF, CSV
Export: DWG, DXF, TXT, CSV, JPG

Data interface

USB cable connection

WLAN

Operating time

8 h

Batteries

Li-ion rechargeable

Charging time

7 h

Protection class

IP54

Dimensions Ø x H

186.6 x 215.5 mm

Weight

2.8 kg

Range of remote control (IR)

30 m

System requirements For a Windows® device (not included in the scope of delivery)

Operating system
Windows 7 or higher

Recommended screen resolution
Minimum 1280 x 800 pixels, desktop or touchscreen

Further recommendations
Use of a pen for the touchscreen, replacement batteries, robust housing

Following tablet computers are tested and recommended by Leica Geosystems AG

Microsoft Surface Pro 3 – i5
128 GB. WiFi. 12”, Windows 10 Pro

Leica CC 80 (iCON)
7”, Windows 8.1 Pro

Article no. 844692

Leica 3D Disto

Leica 3D Disto software for Windows®

Remote control RM100

Power supply for 3D Disto

4 country-specific power cords for worldwide use

USB memory stick

Self-adhesive target points

Ruler (for measuring hidden points)

Leica GZ93 target plate

USB cable

Quickstart

Customer Care Package for 3D Disto

Benefit from online access to a network of support professionals who will work with you to solve any problems that may arise. Additionally get the latest software improvements and new features to keep your products up-to-date.
Article no. 6013493 (for one year)
Article no. 6013494 (for two years)
Article no. 6013495 (for three years)
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.
Leica Lino Family
Excel on every point across the whole range

Leica Lino L2
You can rely on its sharp lines
The handy cross line laser with outstanding laser line visibility up to 25 meters. Its exceptionally long horizontal and vertical laser lines are projected to floors, walls and ceilings at more than 180 degrees. Smart magnetic adapters allow for quick and precise positioning.

Article no. 848435
Article no. 864413 set incl. Li-ion battery in carrying case

Leica Lino L2G
Visibility on a new level
The green cross line laser with up to 4-times higher visibility. The Li-ion battery ensures continuous working. The Lino can easily be connected to precision engineered adapters via strong magnets, allowing to work faster and more precisely.

Article no. 912932
Article no. 864420 set incl. Li-ion battery and UAL 130 adapter in carrying case

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

Article no. 864427 set in carrying case

Leica Lino L2P5
Combining points and lines
The small and handy all-rounder for quick setting-out, layout and alignment jobs. It comes with a smart magnetic adapter which allow to position the instrument quickly and with absolute precision. Due to the Li-ion batteries it runs for up to 44 hours on one charge.

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

Leica Lino L2P5G
Multi-functionality with highest visibility
The point and cross line laser with the best green laser technology. Its green laser beams and points are up to four times more visible to the human eye. Li-ion batteries allow this all-round laser tool to run up to 28 hours on just one charge. With the smart magnetic adapters it can be set up over edges and profiles, attached to iron pipes or to various tracks and bars.

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

Leica Lino L4P1
Multi line laser to cover a wide range of applications. It can be turned by 360° on a base plate with fine adjustment thus facilitating simple and easy marking of 90° layouts. It is easy to exchange the Li-ion batteries with 24 hours of operation with normal alkaline batteries. Target plate red, Li-ion battery pack, international charger with 4 plugs, Alkaline battery tray, hard case.

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

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

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

Leica Lino L6G

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

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

Technical Data

<table>
<thead>
<tr>
<th></th>
<th>Lino L2s</th>
<th>Lino L2s</th>
<th>Lino L2c</th>
<th>Lino L2G</th>
<th>Lino P5</th>
<th>Lino L2P5</th>
<th>Lino L2P5G</th>
<th>Lino L4P1</th>
<th>Lino L6Rs</th>
<th>Lino L6R</th>
<th>Lino L6Gs</th>
<th>Lino L6G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range*</td>
<td>25 m</td>
<td>25 m</td>
<td>35 m</td>
<td>35 m</td>
<td>30 m</td>
<td>25 m</td>
<td>35 m</td>
<td>15 m</td>
<td>25 m</td>
<td>25 m</td>
<td>35 m</td>
<td>35 m</td>
</tr>
<tr>
<td>Smart Targeting</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Leveling accuracy</td>
<td>±0.2 mm/m</td>
<td>±0.2 mm/m</td>
<td>±0.2 mm/m</td>
<td>±0.2 mm/m</td>
<td>±0.2 mm/m</td>
<td>±0.2 mm/m</td>
<td>±0.2 mm/m</td>
<td>±0.2 mm/m</td>
<td>±0.2 mm/m</td>
<td>±0.2 mm/m</td>
<td>±0.2 mm/m</td>
<td>±0.2 mm/m</td>
</tr>
<tr>
<td>Self-levelling range</td>
<td>±0°</td>
<td>±0°</td>
<td>±0°</td>
<td>±0°</td>
<td>±0°</td>
<td>±0°</td>
<td>±0°</td>
<td>±0°</td>
<td>±0°</td>
<td>±0°</td>
<td>±0°</td>
<td>±0°</td>
</tr>
<tr>
<td>Dot accuracy</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
</tr>
<tr>
<td>Vertical line accuracy</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
<td>±0.3 mm/m</td>
</tr>
<tr>
<td>Beam direction</td>
<td>vertical, horizontal</td>
<td>vertical, horizontal</td>
<td>vertical, horizontal, up, down, forward, right, left</td>
<td>vertical, horizontal, up, down, right, left</td>
<td>vertical, horizontal, up, down, right, left</td>
<td>3 vertical, 1 horizontal, 1 plumb down</td>
<td>1 x 360° vertical front, 1 x 360° vertical side, 1 x 360° horizontal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laser type</td>
<td>635 nm / Class 2</td>
<td>525 nm / Class 2</td>
<td>635 nm / Class 2</td>
<td>525 nm / Class 2</td>
<td>635 nm / Class 2</td>
<td>525 nm / Class 2</td>
<td>635 nm / Class 2</td>
<td>525 nm / Class 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection class</td>
<td>45°C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Battery type</td>
<td>AA 3 x 1.5 V</td>
<td>Li-ion rechargeable (or AA 3 x 1.5 V)</td>
<td>AA 3 x 1.5 V</td>
<td>Li-ion rechargeable (or AA 3 x 1.5 V)</td>
<td>AA 3 x 1.5 V</td>
<td>Li-ion rechargeable (or AA 3 x 1.5 V)</td>
<td>AA 3 x 1.5 V</td>
<td>Li-ion rechargeable (or AA 3 x 1.5 V)</td>
<td>AA 3 x 1.5 V</td>
<td>Li-ion rechargeable (or AA 3 x 1.5 V)</td>
<td>AA 3 x 1.5 V</td>
<td>Li-ion rechargeable (or AA 3 x 1.5 V)</td>
</tr>
<tr>
<td>Operating time**</td>
<td>up to 13 h (AA)</td>
<td>up to 46 h (Li-ion)</td>
<td>up to 7 h (AA)</td>
<td>up to 37 h (Li-ion)</td>
<td>up to 28 h (AA)</td>
<td>up to 26 h (Li-ion)</td>
<td>up to 25 h (AA)</td>
<td>up to 36 h (Li-ion)</td>
<td>up to 11 h (AA)</td>
<td>up to 11 h (Li-ion)</td>
<td>up to 11 h (Li-ion)</td>
<td>up to 11 h (Li-ion)</td>
</tr>
<tr>
<td>Weight with batteries</td>
<td>500 g</td>
<td>510 g</td>
<td>500 g</td>
<td>510 g</td>
<td>495 g</td>
<td>510 g</td>
<td>510 g</td>
<td>1171 g</td>
<td>751 g</td>
<td>781 g</td>
<td>781 g</td>
<td>781 g</td>
</tr>
</tbody>
</table>

* depending on lighting conditions.

** depending on laser mode.
Leica Lino Family
Accessories supplied with / optional

1 Receiver RVL 80
For detecting red line laser beams over longer distances or in difficult light conditions. Localizes the laser beam at a distance of up to 80 m. Optical and acoustic signals help to find the laser plane. Compatible with Lino L2, L2P5, L6R and L4P1.
Article no. 838757

2 RGR 200 Receiver
Article no. 866090

3 UAL 130 Wall Mount
Article no. 866131

4 Wall Bracket
Wall and ceiling adapter with 1/4” screw, of universal application thanks to screw fastening. Compatible with L4P1.
Article no. 758839

5 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

6 TRI 70 Tripod
The small portable tripod is intended for everyday use. Its features include easy fine adjustment and a bubble level. Extendable length from 0.40 m to 1.15 m.
Article no. 794963

7 TRI 100 Tripod
Quality tripod with bubble level, tilting platform, and very easy fine adjustment. Extendable length from 0.70 m to 1.74 m. Compatible with DISTO™ and Lino.
Article no. 757938

8 GLB 10R / GLB 10G Laser Glasses
Red and green laser glasses for improved visibility of laser lines and dots in bright rooms and outdoors up to 15 m.
Article no. 834 534 (for red lasers)
Article no. 772 796 (for green lasers)

9 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, L2PS, L2PSG
Article no. 835711 for L4P1
Article no. 913012 for L6R and L6G

10 Drop protector for Lino devices
Lanyard that can be fixed at 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 new Leica Rugby CLA-ctive / CLH Upgradable 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.

26–31 Leica Rugby CLA-ctive / CLH Upgradable Lasers

32–35 Leica Rugby 600 Series

36–37 Leica Piper Series

38–39 Machine Receivers
Leica Rugby CLA-ctive

With the unique capability to adapt to nearly any application need through software upgrades and onboard operation, the Leica Rugby CLA-ctive is the first 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

<table>
<thead>
<tr>
<th>Article</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6016027</td>
<td>Rugby CLA-ctive Basic</td>
</tr>
</tbody>
</table>

Rugby CLA-ctive packages including battery, charger and carrying case

<table>
<thead>
<tr>
<th>Article</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6016028</td>
<td>Rugby CLA-ctive &amp; CLX250, manual grade</td>
</tr>
<tr>
<td>6016029</td>
<td>Rugby CLA-ctive &amp; CLX500, manual grade, lay down</td>
</tr>
<tr>
<td>6016031</td>
<td>Rugby CLA-ctive &amp; CLX600, auto single grade, lay down</td>
</tr>
<tr>
<td>6016032</td>
<td>Rugby CLA-ctive &amp; CLX700, auto dual grade, lay down</td>
</tr>
</tbody>
</table>
Leica Rugby CLH

With the unique capability to be adapted for nearly any application requirement via a software upgrade, the Leica Rugby CLH is the first upgradable laser to maximise productivity and performance on-site. The upgrade options deliver unmatched performance in most levelling and aligning tasks, making it an ideal all-rounder laser for horizontal applications.

Basic Instrument including battery, charger and carrying case

<table>
<thead>
<tr>
<th>Article</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6012274</td>
<td>Rugby CLH Basic</td>
</tr>
</tbody>
</table>

Rugby CLH packages including battery, charger and carrying case

<table>
<thead>
<tr>
<th>Article</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6012276</td>
<td>Rugby CLH &amp; CLX200, manual grade</td>
</tr>
<tr>
<td>6012277</td>
<td>Rugby CLH &amp; CLX300, semi auto single grade</td>
</tr>
<tr>
<td>6012278</td>
<td>Rugby CLH &amp; CLX400, semi auto dual grade</td>
</tr>
</tbody>
</table>

Combo required for all packages
### LEICA RUGBY/CLA-CTIVE

<table>
<thead>
<tr>
<th>Warranty</th>
<th>CLH</th>
<th>CLA-CTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5Y / 2Y knockdown</td>
<td>5Y / 2Y knockdown</td>
<td></td>
</tr>
</tbody>
</table>

- **Grade capability** (X/Y Axes): 8% / 15%
- **Self-leveling range**: ±6° / ±1°
- **Operating range with Combo, RE 140/160**: 1,350 m diameter
- **Remote range**: 600 m diameter

#### Laser class: 2

- **Environmental standard**: IP68 / MIL-STD-810G
- **Operating temperature**: -20 °C to +50 °C / -4 °F to +122 °F
- **Storage temperature**: -40 °C to +70 °C / -40 °F to +158 °F
- **Self-levelling accuracy**: ±1.5 mm at 30 m (±1/16” at 100 ft)

#### Operating range with Combo, RE 140/160

- **Self-levelling range**: ±6° / ±1°
- **Operating range with Combo, RE 140/160**: 1,350 m diameter
- **Remote range**: 600 m diameter

### Leica Combo Receiver / Remote

**Leica Combo Receiver / Remote**

- **Leica Combo Receiver / Remote**: Combo including Bracket (receiver & remote for Rugby CLA-ctive, CLH)
- **Article**: 864848
- **Description**: Combo receiver & remote

#### LEICA COMBO (RECEIVER/REMOTE)

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

** ** 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

---

1. A800 Li-ion Battery Pack
2. A100 Li-ion Charger
3. USB Charger
4. USB Cable C-C
5. USB Cable C-A
6. A130 12 V Battery Cable
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.

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
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
   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 Rod Eye Receivers

For all Rugby lasers

1. Rod Eye 120 Basic and Bracket
   Great receiver for all general construction applications. Detection window of 7 cm.
   Article no. 789922
2. Rod Eye 120G and Bracket
   Designed to capture the green laser beam. Detection window of 7 cm.
   Article no. 844745
3. Rod Eye 140 Classic and Bracket
   Standard receiver with arrow display. Detection window 12 cm.
   Article no. 789923
4. Rod Eye 160 Digital and Bracket
   Great receiver with digital readout. Detection window 12 cm.
   Article no. 789924

Technical Data Rod Eye 120G Basic Rod Eye 120 Basic Rod Eye 140 Classic Rod Eye 160 Digital

| Working diameter (laser dependent) | 400 m | 900 m | 1,350 m |
| Detection window | 70 mm | 120 mm |
| Digital readout | ✔ | ✔ | ✔ | ✔ |
| Detectable spectrum | 500 nm to 570 nm | 600 nm to 800 nm |
| Audio volumes | High / Low / Off | High / Med / Low / Off |
| Detection bandwidth | Fine ±1 mm Medium ±2 mm Coarse ±3 mm |
| 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: 6016061

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: 6016958

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

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

---

Piper 100-

<table>
<thead>
<tr>
<th>Laser beam color</th>
<th>2M</th>
<th>3R</th>
<th>2M GREEN</th>
<th>3R GREEN</th>
<th>3R</th>
<th>3R GREEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wave length</td>
<td>635nm</td>
<td>520nm</td>
<td>635nm</td>
<td>520nm</td>
<td>635nm</td>
<td>520nm</td>
</tr>
<tr>
<td>Laser class</td>
<td>2M</td>
<td>3R</td>
<td>2M</td>
<td>3R</td>
<td>3R</td>
<td>3R</td>
</tr>
<tr>
<td>Max. average radiant power</td>
<td>1.2mW</td>
<td>4.75mW</td>
<td>1.2mW</td>
<td>4.8mW</td>
<td>4.75mW</td>
<td>4.8mW</td>
</tr>
<tr>
<td>Working range</td>
<td>200m/650 ft</td>
<td></td>
<td>200m/650 ft</td>
<td></td>
<td>200m/650 ft</td>
<td></td>
</tr>
<tr>
<td>Grade range</td>
<td>-10° to +25°</td>
<td></td>
<td>-10° to +25°</td>
<td></td>
<td>-10° to +25°</td>
<td></td>
</tr>
<tr>
<td>Self-levelling range</td>
<td>-15% to +30%</td>
<td></td>
<td>-15% to +30%</td>
<td></td>
<td>-15% to +30%</td>
<td></td>
</tr>
<tr>
<td>Line movement</td>
<td>6m at 30m / 20ft at 100ft</td>
<td></td>
<td>6m at 30m / 20ft at 100ft</td>
<td></td>
<td>6m at 30m / 20ft at 100ft</td>
<td></td>
</tr>
<tr>
<td>Battery*</td>
<td>Li-Ion, up to 40h</td>
<td></td>
<td>Li-Ion, up to 40h</td>
<td></td>
<td>Li-Ion, up to 40h</td>
<td></td>
</tr>
<tr>
<td>Charging time*</td>
<td>4h</td>
<td></td>
<td>4h</td>
<td></td>
<td>4h</td>
<td></td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20°C to +50°C / -4°F to +122°F</td>
<td></td>
<td>-20°C to +50°C / -4°F to +122°F</td>
<td></td>
<td>-20°C to +50°C / -4°F to +122°F</td>
<td></td>
</tr>
<tr>
<td>Dimensions (diameter x length)</td>
<td>96mm x 267mm / 3.9” x 10.5”</td>
<td></td>
<td>96mm x 267mm / 3.9” x 10.5”</td>
<td></td>
<td>96mm x 267mm / 3.9” x 10.5”</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>2.0Kg / 4.4lbs</td>
<td></td>
<td>2.0Kg / 4.4lbs</td>
<td></td>
<td>2.0Kg / 4.4lbs</td>
<td></td>
</tr>
<tr>
<td>Housing</td>
<td>Cast aluminium</td>
<td></td>
<td>Cast aluminium</td>
<td></td>
<td>Cast aluminium</td>
<td></td>
</tr>
<tr>
<td>Protection class</td>
<td>IP68</td>
<td></td>
<td>IP68</td>
<td></td>
<td>IP68</td>
<td></td>
</tr>
<tr>
<td>Wireless remote distance</td>
<td>Front 150m / 500ft</td>
<td></td>
<td>Back 10m / 35ft</td>
<td></td>
<td>Back 10m / 35ft</td>
<td></td>
</tr>
<tr>
<td>Self levelling accuracy**</td>
<td>+/- 1.5mm at 30m / +/- 1/16&quot; at 100ft</td>
<td></td>
<td>+/- 1.5mm at 30m / +/- 1/16&quot; at 100ft</td>
<td></td>
<td>+/- 1.5mm at 30m / +/- 1/16&quot; at 100ft</td>
<td></td>
</tr>
<tr>
<td>Auto targeting</td>
<td>No</td>
<td></td>
<td>Yes</td>
<td></td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Warranty</td>
<td>No cost period: 5 years</td>
<td></td>
<td>No cost period: 5 years</td>
<td></td>
<td>No cost period: 5 years</td>
<td></td>
</tr>
</tbody>
</table>

* Battery operating/charging times are dependent upon environmental conditions
** Self levelling accuracy is defined at 25°C (77°F)
Leica MC200 Depthmaster
Depth indication system

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

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

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

LMR 240
240° machine receiver

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

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

LMR 360
360° machine mounted receiver

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

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

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

42 Leica NA300 Series

43 Leica NA500 Series

44 Leica NA700 Series

45 Leica NA2 / NAK2
Leica NA300 Series

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

<table>
<thead>
<tr>
<th>NA320</th>
<th>NA324</th>
<th>NA332</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnification</td>
<td>20x</td>
<td>24x</td>
</tr>
<tr>
<td>Angle measurement</td>
<td>360°</td>
<td>360°</td>
</tr>
<tr>
<td>Standard deviation (per km double-run)</td>
<td>2.5 mm</td>
<td>2.0 mm</td>
</tr>
<tr>
<td>Shortest target distance</td>
<td>≤1.0 m</td>
<td>≤1.0 m</td>
</tr>
<tr>
<td>Dust / Water protection</td>
<td>IP54</td>
<td>IP54</td>
</tr>
<tr>
<td>Working temperature</td>
<td>–20 °C to +40 °C</td>
<td>–20 °C to +40 °C</td>
</tr>
<tr>
<td>Weight</td>
<td>1.5 kg</td>
<td>1.5 kg</td>
</tr>
<tr>
<td>PROTECT service offering</td>
<td>Manufacturer’s Warranty: Lifetime** No Cost period: 1 year</td>
<td>Manufacturer’s Warranty: Lifetime** No Cost period: 1 year</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>NA520</th>
<th>NA524</th>
<th>NA532</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnification</td>
<td>20x</td>
<td>24x</td>
</tr>
<tr>
<td>Angle measurement</td>
<td>360°</td>
<td>360°</td>
</tr>
<tr>
<td>Standard deviation (per km double-run)</td>
<td>2.5 mm</td>
<td>1.9 mm</td>
</tr>
<tr>
<td>Shortest target distance</td>
<td>≤1.0 m</td>
<td>≤1.0 mm</td>
</tr>
<tr>
<td>Dust / Water protection</td>
<td>IP56</td>
<td>IP56</td>
</tr>
<tr>
<td>Working temperature</td>
<td>–20 °C to +50 °C</td>
<td>–20 °C to +50 °C</td>
</tr>
<tr>
<td>Weight</td>
<td>1.5 kg</td>
<td>1.5 kg</td>
</tr>
<tr>
<td>PROTECT service offering</td>
<td>Manufacturer’s Warranty: Lifetime** No Cost period: 1 year</td>
<td>Manufacturer’s Warranty: Lifetime** No Cost period: 1 year</td>
</tr>
</tbody>
</table>

** Product lifetime

Leica NA300 and NA500 Accessories

1 CT104 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.

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

Accessories

1 CT160 Tripod with screw clamps
CT160 Tripod with screw clamps. Complies with NA Levels
Article no. 864856

2 CLR102 Telescopic Level Staff
5 m length, 4 sections, front side with E-graduation and back side with mm graduation.
Article no. 727588

Leica NA2 / NAK2
The classical level

The Leica NA2 universal automatic level meets all requirements regarding precision, convenience and reliability. It was designed by surveyors and development engineers with years of experience, that know what a field instrument has to be able to do.

The NA2 soon pays for itself, because it can be used for all types of surveying jobs - on building sites for routine levelling, in engineering projects and for geodetic control at all levels of accuracy.

Leica NA2 and Leica NAK2 are two universal automatic levels 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

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

Technical Data NA720 NA724 NA730 plus

<table>
<thead>
<tr>
<th>Magnification</th>
<th>20x</th>
<th>24x</th>
<th>30x</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angle measurement</td>
<td>360° / 400 gon</td>
<td>360° / 400 gon</td>
<td>360° / 400 gon</td>
</tr>
<tr>
<td>Standard deviation (per km double-run)</td>
<td>2.5 mm</td>
<td>2.0 mm</td>
<td>0.7 mm</td>
</tr>
<tr>
<td>Dust / Water protection</td>
<td>IP57</td>
<td>IP57</td>
<td>IP57</td>
</tr>
<tr>
<td>Working temperature</td>
<td>-20 °C to +50 °C</td>
<td>-20 °C to +50 °C</td>
<td>-20 °C to +50 °C</td>
</tr>
<tr>
<td>Weight</td>
<td>1.6 kg</td>
<td>1.7 kg</td>
<td>1.7 kg</td>
</tr>
</tbody>
</table>

PROTECT service offering
Manufacturer’s Warranty: Lifetime**
No Cost period: 2 years

** Product lifetime

Technical Data NA2 NAK2 NAK2 (400gon)

<table>
<thead>
<tr>
<th>Magnification</th>
<th>32x</th>
<th>32x (FOK73 eyepiece optional: 40x)</th>
<th>32x (FOK73 eyepiece optional: 40x)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOK73 eyepiece (optional): 40x</td>
<td>standard: 32x</td>
<td>standard: 32x</td>
<td></td>
</tr>
<tr>
<td>Angle measurement</td>
<td>-</td>
<td>0.7 mm/km</td>
<td></td>
</tr>
<tr>
<td>Standard deviation (per km double-run)</td>
<td>0.3 mm (with parallel-plate micrometer)</td>
<td>0.3 mm (with parallel-plate micrometer)</td>
<td></td>
</tr>
<tr>
<td>Dust / Water protection</td>
<td>IP53</td>
<td>IP53</td>
<td></td>
</tr>
<tr>
<td>Working temperature</td>
<td>-20 °C to +50 °C</td>
<td>-20 °C to +50 °C</td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>2.6 kg</td>
<td>2.6 kg</td>
<td></td>
</tr>
</tbody>
</table>

PROTECT service offering
Manufacturer’s Warranty: Lifetime**
No Cost period: 3 years

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

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

48–49 Manual Total Stations

50–51 Robotic Total Stations

52 Leica AP20 AutoPole

54 Construction Layout Tool Leica iCON iCT30

55 Leica iCON Controllers

58 Leica iCON GNSS Sensors
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.

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.

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

*More packages available. Please contact your responsible sales contact.
Leica iCON iCR70

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

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

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

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

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

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.

Leica iCON iCR80 / iCR80S** packages:

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

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

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

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

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

All Leica iCON iCR80 / iCR80S 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

* 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.
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-builds and other measurement tasks, which are completed with less mistakes, minimising rework and delays.

Use the Leica AP20 AutoPole in conjunction with:

- iCON Field controllers (running the iCON field software 7.0): CC70 and CC80
- iCON Robotic Total Stations (connected to the iCON controller): iCR70, iCR80S and iCR80

LEICA AP20 AUTOPOLE VARIANTS

<table>
<thead>
<tr>
<th>Article no.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>922835</td>
<td>AP20 H</td>
</tr>
<tr>
<td>922836</td>
<td>AP20 ID</td>
</tr>
<tr>
<td>922837</td>
<td>AP20 T</td>
</tr>
<tr>
<td>922838</td>
<td>AP20</td>
</tr>
<tr>
<td>913899</td>
<td>CRP4 Metric Pole</td>
</tr>
<tr>
<td>922838</td>
<td>CRP5 Feet Pole</td>
</tr>
</tbody>
</table>

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.

TargetID
The TargetID functionality makes sure that your total station is locked to your target and remains locked until your job is done.
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 & CC80 Tablet
Leica iCON 9" iCT30 Construction Layout Tool & iCON build Field Software & CC80 7" WIN Tablet.

Leica iCON Controllers
Rugged, lightweight controllers for uncompromising site work

Leica iCON CC70
High-end controller designed for standard construction measure and stakeout tasks

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

Leica iCON CC80
Rugged premium controller with maximum performance to boost all site tasks to improve productivity without compromises.

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

Leica iCON CC70 / CC80
- Leica iCON CC70 / CC80 controller series are the world’s thinnest and lightest fully-rugged 7" Windows® tablets and feature a battery life of up to 16 hours
- Large 7" sunlight readable touchscreen display for convenient operation
- Windows 10 multi-lingual, multi-touch operating system
- Various wireless communication possibilities (Bluetooth®, Wi-Fi and integrated 4G / LTS multi-carrier mobile broadband) for use with different sensors and internet access
- The CCD17 Bluetooth® radio kit extends the robotic working distance between the CC70 / CC80 tablet computers and Leica ICON or Nova total stations
Leica iCON CC200

The rugged 10” Leica iCON CC200 field controller is your on-site partner that promises to deliver longer operating times and more comfort, thanks to its single 12-hour battery and large screen. The iCON CC200 is designed to handle use cases requiring large amounts of data smoothly. Used in combination with Leica iCON site or Leica iCON build construction field software, it is the ideal solution for all positioning and measuring tasks on your construction site – including on-machine applications.

Features:
- Large 10” screen size
- Increased performance, ideal for handling large amounts of data
- Hard keys with user-defined shortcuts
- ‘Glove’ and ‘rain’ mode for all weather conditions
- Up to 12 hours of operating time
- Anti-reflective (AR) screen
- ‘Portrait’ mode to support specific applications

Article no. Description
972082 CC200-0, Rugged 10” Tablet PC, Win10, EU
972084 CC200-1, Rugged 10” Tablet PC, Win10, US/CA/MX
972085 CC200-2, Rugged 10” Tablet PC, Win10, JP
972094 CC200-3, Rugged 10” Tablet PC, Win10, KR
972087 CC200-4, Rugged 10” Tablet PC, Win10, China
972089 CC200-5, Rugged 10” Tablet PC, Win10, AUS/NZ
Leica iCON GNSS Sensors
Construction GNSS Smart Antennas

Leica iCON gps 60
Entry-level GNSS RTK rover

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

- Easy to use and equipped with the construction tailored Leica iCON site field software, the iCON gps 30 facilitates your entry into the Leica iCON GNSS portfolio.
- The light, compact and balanced design makes it comfortable to use and carry in the field.
- With the highest level of position reliability in its class, the iCON gps 30 delivers accurate results and increases productivity.

Basic IC30 Global Kit: includes IC30 & iCON site entry Software & CC70 7” Tablet PC & Pole Accessories
Article No. 6015691

Leica iCON GPS 60

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

- Superior GNSS Technology for maximum accuracy and reliability. Features Leica SmartTrack+ and SmartCheck+ and Leica xRTK.
- Future-proof satellite tracking. Works with all existing and future satellite systems.
- SmartLink Fill – bridges RTK communication gaps up to 10 minutes
- Multi-purpose GPS solution. Can be used as construction site GNSS Base, Rover or NetRover, in supervisor vehicle on site and entry level machine control mounted inside a machine.
- Unique communication flexibility, featuring integrated radio, modem and Bluetooth®.
- Integrated NTRIP Server and Caster for Internet based Reference Station.
- No controller required for base station set-up means you need less hardware.
- Unique flexible software licensing and feature upgrade concept. You can order packages or individual licences when you need them, investing when you need to.

iCON gps Rover Packages with iCON site (iCON build)
iCON gps 60 GNSS SmartAntenna Network Kit: includes IC60 Network Package & iCON site Field Software & CC80 7” Tablet PC & Pole Accessories.
Article no. 6015440 (6015445)
iCON gps 60 GNSS SmartAntenna Performance Kit: includes IC60 Performance Package & iCON site Field Software & CC80 7” Tablet PC & Pole Accessories.
Article no. 6015441 (6015446)
Leica iCON gps 70 Series
Ultimate performance for your construction site

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

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

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

iCON gps 70 GNSS SmartAntenna Value Kit; includes iCG70 Value Package & iCON site Field Software & CC80 7” Tablet PC & Pole Accessories.
Article no. 6013901
iCON gps 70 GNSS SmartAntenna Performance Kit; includes iCG70 Performance Package & iCON site Field Software & CC80 7” Tablet PC & Pole Accessories.
Article no. 6013902
iCON gps 70 T GNSS SmartAntenna Value Kit; includes iCG70 T Performance Package & iCON build Field Software & CC80 7” Tablet PC & Pole Accessories.
Article no. 6013926
iCON gps 70 T GNSS SmartAntenna Performance Kit; includes iCG70 T Performance Package & iCON site Field Software & CC80 7” Tablet PC & Pole Accessories.
Article no. 6013927
iCON gps 70 GNSS SmartAntenna Value Kit; includes iCG70 Value Package & iCON build Field Software & CC80 7” Tablet PC & Pole Accessories.
Article no. 6013935
iCON gps 70 GNSS SmartAntenna Performance Kit; includes iCG70 Performance Package & iCON build Field Software & CC80 7” Tablet PC & Pole Accessories.
Article no. 6013936
iCON gps 70 T GNSS SmartAntenna Value Kit; includes iCG70 T Performance Package & iCON build Field Software & CC80 7” Tablet PC & Pole Accessories.
Article no. 6013950
iCON gps 70 T GNSS SmartAntenna Performance Kit; includes iCG70 T Performance Package & iCON build Field Software & CC80 7” Tablet PC & Pole Accessories.
Article no. 6013951

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

Leica iCON 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
954196 iCON gps 160 Smart Antenna LTE/Ext Radio Base
954197 iCON gps 160 Smart Antenna LTE/Ext Radio Value
954198 iCON gps 160 Smart Antenna LTE/Ext Radio Ult.

iCON gps 160 Smart Antenna LTE Value Kit; includes iCG160 Value Package & iCON site Field Software & CC80 7” Tablet PC & Pole Accessories.
Article no. 954189
iCON gps 160 Smart Antenna LTE Performance Kit; includes iCG160 Performance Package & iCON site Field Software & CC80 7” Tablet PC & Pole Accessories.
Article no. 954190
iCON gps 160 Smart Antenna LTE Ultimate Kit; includes iCG160 Ultimate Package & iCON site Field Software & CC80 7” Tablet PC & Pole Accessories.
Article no. 954192
iCON gps 160 Smart Antenna LTE/Ext Radio Base Kit; includes iCG160 LTE/Ext Radio Base Package & iCON site Field Software & CC80 7” Tablet PC & Pole Accessories.
Article no. 954196
iCON gps 160 Smart Antenna LTE/Ext Radio Value Kit; includes iCG160 LTE/Ext Radio Value Package & iCON site Field Software & CC80 7” Tablet PC & Pole Accessories.
Article no. 954197
iCON gps 160 Smart Antenna LTE/Ext Radio Ult. Kit; includes iCG160 LTE/Ext Radio Ult. Package & iCON site Field Software & CC80 7” Tablet PC & Pole Accessories.
Article no. 954198

*More packages available. Please contact your responsible sales contact.
10 Years Leica iCON
Celebrating a decade of never losing line of sight to you, our construction customers

We’re not just celebrating the tenth anniversary of Leica iCON, we’re celebrating 10 years of helping construction professionals bridge the digital divide.
10 years of digital solutions that give you the power to do your work more confidently.
10 years of tailored workflow solutions that help you work faster.
10 years of eliminating cost and deadline overruns.
10 years of greater flexibility in the field.
10 years of value by leading the industry in lowest total cost of ownership.
10 years of helping you do what you do, just better.

And finally, we’re celebrating 10 years of Leica iCON and the construction professionals who trusted our solutions to bring more accuracy, flexibility and productivity to their work.

What did we accomplish over the last decade?
In a word, more

Here's to ten years of getting the job done right
Detection systems

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

66 Leica DSX
68 Leica DS2000
69 Leica ULTRA
71 Leica DD Smart Series
73 Leica DD100 Series
74 Leica DA Signal Transmitters
75 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.

<table>
<thead>
<tr>
<th>DSX Utility Detection System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Frequency (GHz)</td>
</tr>
<tr>
<td>Detection Mode</td>
</tr>
<tr>
<td>Detection Utilities</td>
</tr>
<tr>
<td>Detection Depth</td>
</tr>
<tr>
<td>Acquisition Speed</td>
</tr>
<tr>
<td>Scan Interval</td>
</tr>
<tr>
<td>Positioning</td>
</tr>
<tr>
<td>Environmental</td>
</tr>
<tr>
<td>Weight</td>
</tr>
<tr>
<td>Battery</td>
</tr>
<tr>
<td>Operating Temperature</td>
</tr>
<tr>
<td>Warranty</td>
</tr>
</tbody>
</table>

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

CT1000 Controller
- with LTE Article no. 880920
- without LTE Article no. 880929

Accessories
- **Grid Assistance square** Article no. 880909
- **PS1000 Pole support** (for positioning system) Article no. 880854
- **AB1000 Accessory Bag** Article no. 880867
- **R801000 Ram Ball Mount Interface** Article no. 891410
- **TC1000 Tablet Cradle** Article no. 891411
- **DSX battery Li-ion** 14.8 V / 5.8 Ah Article no. 793975
- **DSX battery charger** Article no. 852413
Leica DS2000 Utility Detection Radar
Uncovering safer, faster, more

The Leica DS2000 Utility Detection Radar finds all potential threats, including non-conductive pipes and fibre optics. This will lower the risk of accidently 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
Article no. 6011498

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 customized frequencies and shows direction to the utility through left/right guidance arrows and an on-screen compass.
Article no. 818699

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

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

Accessories

AS2000 GNSS Antenna Support
Article no. 847113

68

69
Leica ULTRA Locators

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

Leica ULTRA Transmitters

<table>
<thead>
<tr>
<th>S WATT</th>
<th>12 WATT</th>
<th>Advanced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power output</td>
<td>5 W, 12 W, 12 W</td>
<td></td>
</tr>
<tr>
<td>Enabled frequencies</td>
<td>512 Hz, 3.14 kHz, 8.192 kHz, 32.768 kHz, 83.1 kHz, 200 kHz</td>
<td></td>
</tr>
<tr>
<td>Custom frequencies</td>
<td>Up to 100 custom frequencies from 256 Hz - 83 kHz</td>
<td></td>
</tr>
<tr>
<td>External 12V power connection</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Receiver / transmitter communications</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>PROTECT service offering</td>
<td>Manufacturer’s Warranty: 1 year</td>
<td></td>
</tr>
</tbody>
</table>

Leica ULTRA Accessories

1. A Frame
   Buried cable sheath fault finder.
   Article no. 818708

2. Transmitter Signal Clamps
   For use with ULTRA system signal transmitter.
   Article no. 818704 125 mm (5") Multi Clamp
   Article no. 818705 178 mm (7") Multi Clamp
   Article no. 832972 80 mm (3.15") Broadband Clamp

3. RFID Reader
   For locating buried marker balls.
   Article no. 842432

4. Receiver Stethoscope
   Article no. 842433

5. Ultra Locator Bag
   Article no. 818706

6. Receiver Signal clamp
   Article no. 842434

7. Ultra Live Power Adapter
   Article no. 842435

8. Dual Output cable
   Article no. 818711

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

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

Leica DD220 SMART utility locator

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

Article no. 850268

Leica DD230 SMART utility locator

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

Article no. 850270
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

<table>
<thead>
<tr>
<th>Technical Data</th>
<th>DD220 SMART</th>
<th>DD230 SMART</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power</strong></td>
<td>50 Hz / 60 Hz mains electrical and harmonics</td>
<td>50 Hz / 60 Hz mains electrical and harmonics</td>
</tr>
<tr>
<td><strong>Radio</strong></td>
<td>15 kHz to 60 kHz</td>
<td>15 kHz to 60 kHz</td>
</tr>
<tr>
<td><strong>Auto</strong></td>
<td>Power, Radio, 33 kHz</td>
<td>Power, Radio, 33 kHz</td>
</tr>
<tr>
<td><strong>Transmitter Modes</strong></td>
<td>151.072 (131) kHz, 32.768 (33) kHz, 8.192 (8) kHz</td>
<td>151.072 (131) kHz, 32.768 (33) kHz, 8.192 (8) kHz</td>
</tr>
<tr>
<td><strong>Depth Range</strong></td>
<td>0.1 m to 5 m / 4 inches to 16.4 ft</td>
<td>0.1 m to 7 m / 4 inches to 23 feet</td>
</tr>
<tr>
<td><strong>Sonde</strong></td>
<td>0.1 m to 7 m / 4 inches to 23 feet</td>
<td>0.1 m to 10 m / 4 inches to 32.8 feet</td>
</tr>
<tr>
<td><strong>Depth Accuracy</strong></td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td><strong>Bluetooth</strong></td>
<td>Class 2 BLE dual mode module</td>
<td>Class 2 BLE dual mode module</td>
</tr>
<tr>
<td><strong>GPS</strong></td>
<td>u-blox® L1 GPS Integrated</td>
<td>u-blox® L1 GPS Integrated</td>
</tr>
<tr>
<td><strong>Memory Capacity</strong></td>
<td>8 GB internal memory</td>
<td>8 GB internal memory</td>
</tr>
<tr>
<td><strong>Protection</strong></td>
<td>IP65</td>
<td>IP65</td>
</tr>
<tr>
<td><strong>Operating Temperature</strong></td>
<td>-20 °C to +50 °C / -4 °F to +122°F</td>
<td>-20 °C to +50 °C / -4 °F to +122°F</td>
</tr>
<tr>
<td><strong>Battery</strong></td>
<td>7.4 V Li-Ion</td>
<td>7.4 V Li-Ion</td>
</tr>
<tr>
<td><strong>Battery operating time</strong></td>
<td>20 h</td>
<td>20 h</td>
</tr>
<tr>
<td><strong>Weight with batteries</strong></td>
<td>2.7 kg / 6 lbs</td>
<td>2.7 kg / 6 lbs</td>
</tr>
<tr>
<td><strong>Warranty</strong></td>
<td>3 years</td>
<td>3 years</td>
</tr>
</tbody>
</table>

* Depth to an undistorted signal
** Data / information according to manufacturer u-blox®GPS; Leica Geosystems does not assume any liability whatsoever for such information
*** Constant use at 20°C / 68°F

Leica DD120

Leica DD130

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

* Depth to an undistorted signal
** Constant use at 20°C / 68°F
Leica DA Signal Transmitters

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

Leica DA220 Signal Transmitter

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

Use the DA220 Signal Transmitter in conjunction with a DD120 locator or a DD220 SMART locator.

Article no. DA220 1 Watt 850272, DA220 3 Watt 850273

Leica DA230 Signal Transmitter

The Leica DA230 Signal Transmitter is designed to keep you safe during excavating operations. With additional trace frequencies allow you to trace utility routes further and deeper. The four power level settings and five trace frequencies put you in control of utility avoidance or utility trace applications.

Use the DA230 Signal Transmitter in conjunction with a DD130 locator or a DD230 SMART locator.

Article no. DA230 1 Watt 850274, DA230 3 Watt 850275

**Technical Data**

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

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

---

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.

<table>
<thead>
<tr>
<th>Article No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>850278</td>
<td>Trace Rod 50M</td>
</tr>
<tr>
<td>850279</td>
<td>Trace Rod 80M</td>
</tr>
</tbody>
</table>

**TRANSMITTER CLAMPS**

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

<table>
<thead>
<tr>
<th>Article No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>850280</td>
<td>Transmitter Clamp 100 mm (4&quot;)</td>
</tr>
<tr>
<td>850281</td>
<td>Transmitter Clamp 80 mm (3.15&quot;)</td>
</tr>
</tbody>
</table>

**PROPERTY PLUG CONNECTOR**

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

<table>
<thead>
<tr>
<th>Article No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>850282</td>
<td>Property Plug connector – UK</td>
</tr>
<tr>
<td>850283</td>
<td>Property Plug connector – EU</td>
</tr>
<tr>
<td>850284</td>
<td>Property Plug connector – US</td>
</tr>
<tr>
<td>850285</td>
<td>Property Plug connector – CH</td>
</tr>
<tr>
<td>850286</td>
<td>Property Plug connector – AUS</td>
</tr>
</tbody>
</table>

**SONDES**

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

<table>
<thead>
<tr>
<th>Article No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>850288</td>
<td>Mini Sonde 33, 18 mm (0.7&quot;) diameter with a 33 kHz output. Working range 7 m (23ft)</td>
</tr>
<tr>
<td>850289</td>
<td>Midi Sonde 8/33, 38 mm (1.5&quot;) diameter with an 8 kHz or 33 kHz output. Working Range 5 m (16.4ft)</td>
</tr>
<tr>
<td>850290</td>
<td>Maxi Sonde 8/33, 55 mm (2.17&quot;) diameter with an 8 kHz or 33 kHz output. Working range 12 m (39.4ft)</td>
</tr>
<tr>
<td>856131</td>
<td>Duct Sonde 33, 24 mm (0.95&quot;) diameter with a 33 kHz output. Working Range 5 m (16.4 ft)</td>
</tr>
<tr>
<td>850291</td>
<td>Clamp Sonde 33, 40 mm (1.57&quot;) 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)</td>
</tr>
</tbody>
</table>

**Carry Bags**

Fabric carry bag for the DD locator range

<table>
<thead>
<tr>
<th>Article No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>850276</td>
<td>Locator system carry bag for the DD locators, DA signal transmitters and accessories</td>
</tr>
<tr>
<td>850277</td>
<td>Leica DD220, DD230 Locator Bag</td>
</tr>
</tbody>
</table>

**Batteries, Chargers and Cables**

<table>
<thead>
<tr>
<th>Article No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>845900</td>
<td>Leica DD SMART, DA Li-ion Battery</td>
</tr>
<tr>
<td>790417</td>
<td>A100 - Li-ion Charger</td>
</tr>
<tr>
<td>850287</td>
<td>Transmitter cable extension</td>
</tr>
</tbody>
</table>
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 fulfill your needs with utility avoidance and mapping applications.

78 DX Shield Software

80 Leica Detection Campus
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

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

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

<table>
<thead>
<tr>
<th>DX Manager Shield</th>
<th>Standard Account</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DX Manager Shield</th>
<th>Pro Subscription</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DX Manager Shield</th>
<th>Expert Subscription</th>
</tr>
</thead>
<tbody>
<tr>
<td>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</td>
<td></td>
</tr>
</tbody>
</table>
Leica Detection Campus

Our Detection Campus provides you with a thorough insight into 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

How to book
Send an email to detection-training.geo@leica-geosystems.com
Precision EML Course

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

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

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

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

How to book
Send an email to detection-training.geo@leica-geosystems.com

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Module Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5004725</td>
<td>EML Tracing and Mapping</td>
<td>Precision Locators Tracing and Mapping (2 days) Learn how to use precision locators to trace and map utilities. Develop your skills even further using the latest positioning and mapping equipment. (excluding transportation time and costs, accommodation costs)</td>
</tr>
<tr>
<td>5004726</td>
<td>Group EML Tracing and Mapping</td>
<td>Precision Locators Tracing and Mapping (2 days) Learn how to use precision locators to trace and map utilities. Develop your skills even further using the latest positioning and mapping equipment. For up to 8 participants (excluding transportation time and costs, accommodation costs)</td>
</tr>
</tbody>
</table>

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

How to book
Send an email to detection-training.geo@leica-geosystems.com

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Module Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5004727</td>
<td>GPR Application to Deliverable</td>
<td>GPR Application to Deliverable (3 days) Over the course of this three-day training course you will learn how to use GPR and how to process and use the data you capture. (excluding transportation time and costs, accommodation costs)</td>
</tr>
<tr>
<td>5004728</td>
<td>Group GPR Application to Deliverable</td>
<td>GPR Application to Deliverable (3 days) Over the course of this three-day training course you will learn how to use GPR and how to process and use the data you capture. For up to 8 participants (excluding transportation time and costs, accommodation costs)</td>
</tr>
</tbody>
</table>

*all Leica Detection Campus courses can either be held in our training centre in the UK or on request locally in your region.*
Leica Geosystems – when it has to be right

Revolutionising the world of measurement and survey for nearly 200 years, Leica Geosystems, part of Hexagon, creates complete solutions for professionals across the planet. Known for premium products and innovative solution development, professionals in a diverse mix of industries, such as aerospace and defence, safety and security, construction, and manufacturing, trust Leica Geosystems for all their geospatial needs. With precise and accurate instruments, sophisticated software, and trusted services, Leica Geosystems delivers value every day to those shaping the future of our world.

Hexagon is a global leader in sensor, software and autonomous solutions. We are putting data to work to boost efficiency, productivity, and quality across industrial, manufacturing, infrastructure, safety, and mobility applications.

Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 21,000 employees in 50 countries and net sales of approximately 3.8bn EUR. Learn more at hexagon.com and follow us @HexagonAB

The Bluetooth® word mark and logos are owned by Bluetooth SIG, Inc. and any use of such marks by Leica Geosystems AG is under licence. Other trademarks and trade names are those of their respective owners.

Copyright Leica Geosystems AG, 9435 Heerbrugg, Switzerland. All rights reserved. Printed in Switzerland – 2018. Leica Geosystems AG is part of Hexagon AB. 743133en – 10.22

* According to product specific technical details

Leica Rugby CLA-ctive and CLH
The first upgradable lasers

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

Leica ICON iCB50 & iCB70
Manual total stations for construction

Leica DISTO™
The original laser distance meter

Leica Geosystems AG
Heinrich-Wild-Strasse
9435 Heerbrugg, Switzerland
+41 71 727 31 31