# **Leica Geosystems Construction Catalogue**Tools for any site

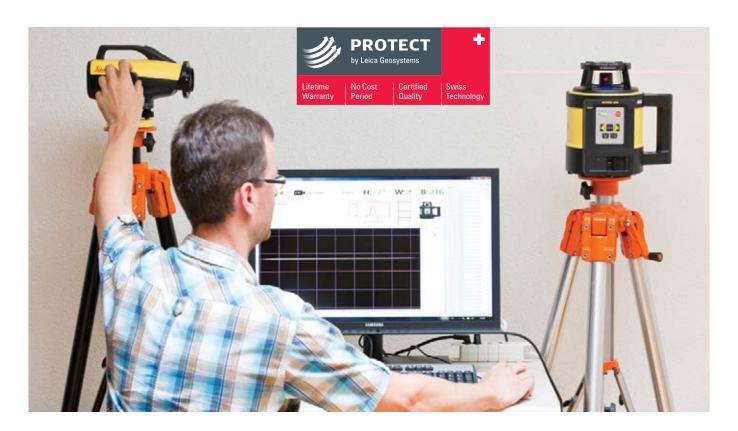






## **Service & Support**

Strongest warranty and calibration certification offering



#### Leica CalMaster

#### **Laser Calibration Services**

Construction sites are harsh environments and put incredible strain on rotating lasers. To ensure the most accurate results and to avoid costly mistakes, these tools need periodic care and calibration, but that can be a strenuous effort resulting in downtime and lost business. Your local Leica Geosystems representatives now offer quick and reliable calibrations with the Leica CalMaster.



#### More value for your business:

As the industry's only calibration system issuing ISO certifications for rotating lasers, you can trust that your Leica Geosystems laser will perform with complete accuracy.

Win more bids with this value-added service and strengthen your professional reputation.

Highest accuracy standard on Leica Geosystems rotating lasers opens up new opportunities making them your new business partner.

#### **PROTECT by Leica Geosystems**

#### Lifetime Manufacturer's Warranty:

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

#### No Cost Period:

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

In the event of a repair being necessary, you benefit from the following services:

- Repair or replacement of all defective parts
- Calibration and check of settings
- Comprehensive functional test and safety check
- Servicing and cleaning of the device

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

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## Leica DISTO™ Family

The right one for each job



### Leica DISTO™ D110

Small size, big possibilities

1 DISTO™ D110

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

Article no. 808088



## Leica DISTO™ D210

Be even more professional

2 DISTO™ D210

The compact and handy entry-level model has many interesting functions and is still simple to use. Addition and subtraction, area and volume calculations for rapid and reliable site measurements. The last 10 results are stored and the measuring reference for the flip-out end-piece is switched automatically.

Article no. 783648



Leica DISTO™ D2

The compact model with 100 m range

3 DISTO™ D2

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

Article no. 837031



### Leica DISTO™ X310

The extremely tough and multifunctional laser distance meter

**⊿** DISTO™ X310

The Leica DISTO™ X310 is IP 65 certified, dust tight and jet water protected. Furthermore it has been tested by dropping from heights of up to 2 m. Thanks to the integrated tilt sensor, precise indirect distance and height measurements are possible. The Leica DISTO™ X310 guarantees reliable measurements even under extreme conditions.

Article no. 790656



#### Leica DISTO™ D410

Precise targeting and simple outdoor measurement

5 DISTO™ D410

The new Leica DISTO™ D410 stands for easy and effortless outdoor distance measurement. With its digital Pointfinder you can target and measure distances even when you cannot see the laser dot. Accurate targeting provides reliable results, especially over long distances and in glaring sunshine. Due to the protection class IP 65, it always delivers reliable results.

Article no. 822822



5

## Leica DISTO™ D510

Great outdoor functionality and apps

6 DISTO™ D510

The DISTO<sup>TM</sup> 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 free apps, you are prepared for the future.

Article no. 792290



### Leica DISTO™ D810 touch

The smartest solution to measure and document

7 DISTO™ D810 touch

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 free app Leica DISTO™ sketch.



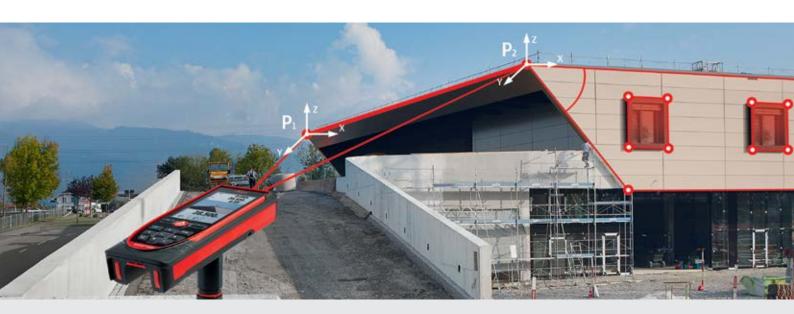
## Leica DISTO™ S910

Measure anything from anywhere

8 DISTO™ S910

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.





Technical Data	DISTO™ D110	DISTO™ D210	DISTO™ D2	DISTO™ X310	DISTO™ D410	DISTO™ D510	DISTO™ D810 touch	DISTO™ S910
Typical accuracy	±1.5 mm	±1 mm	±1.5 mm	±1 mm	±1 mm	±1 mm	±1 mm	±1 mm
Range	0.2 - 60 m	0.05 - 80 m	0.05 - 100 m	0.05 - 120 m	0.05 - 150 m	0.05 - 200 m	0.05 - 200 m	0.05 – 300 m
Measuring units	m, ft, in	m, ft, in	m, ft, in	m, ft, in	m, ft, in	m, ft, in,	m, ft, in	m, ft, in
Tilt sensor				360°		360°	360°	360°
Colour display with Pointfinder					4× zoom	4× zoom	4× zoom, Overview camera	4× zoom, Overview camera
Data interface*	Bluetooth® Smart		Bluetooth® Smart			Bluetooth® Smart	Bluetooth® Smart	Bluetooth® Smart, WLAN
Batteries	Type AAA 2 x 1.5 V	Type AAA 2 × 1.5 V	Type AAA 2 x 1.5 V	Type AAA 2 x 1.5 V	Type AA 2 x 1.5 V	Type AA 2 x 1.5 V	Li-Ion battery	Li-Ion battery
Dimensions	120 × 37 × 23 mm	114 × 50 × 27 mm	116 × 44 × 26 mm	122 × 55 × 31 mm	143 × 58 × 29 mm	143 × 58 × 29 mm	164 × 61 × 31 mm	164 × 61 × 32 mm
Weight with batteries	92 g	126 g	100 g	155 g	198 g	198 g	238 g	290 g
Memory		10 results	10 results	20 displays	30 displays	30 displays	30 displays	50 displays
Multifunctional end-piece		Automatic recognition	Smartbase					
Laser class	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2	Class 2
Protection class	IP 54	IP 54	IP 54	IP 65	IP 65	IP 65	IP 54	IP 54
PROTECT service offering	Manufacturer's Warranty: Lifetime No Cost period: 2 plus 1 years with registration							

<sup>\*</sup> System requirements and other details can be found at www.disto.com

## Leica DISTO™ Family

Professional packages for each application

9 Leica DISTO™ D210 and Lino L2 case – The professional package for easy measuring and alignment

This package was specifically designed for interior applications. It combines everything that you need for accurate and reliable measuring and alignment. The laser distance meter Leica DISTO™ D210, the cross line laser Lino L2 and the tripod TRI 70 are stored safely and ready-to-use in the robust, attractive and functional carrying case.

Article no. 806656



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

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

Article no. 823199



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

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

Article no. 806648



12 Leica DISTO™ S910 case – The complete set to measure anything from anywhere

This package is the complete professional system for convenient aiming, precise measurements of point data and creating drawings. It consists of the Leica DISTO™ S910, the Leica FTA360-S tripod adapter and the Leica TRI 70 tripod. The instrument and accessories come in an attractive, robust case.



## Leica DISTO™ Family

Accessories supplied with / optional

#### 1 TRI 70 Tripod

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

Article no. 794963

#### 2 TRI 100 Tripod

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

Article no. 757938

#### 3 TRI 200 Tripod

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

Article no. 828426

#### 4 FTA360 Adapter

Sturdy adapter with fine adjustment for convenient and precise targeting. The adapter eases the task of targeting above all over long distances, and reduces the discrepancies to a minimum when taking indirect measurements. Especially suitable for the Leica DISTO™ D510 and D810 touch in combination with the TRI 70, TRI 100 and TRI 200 tripods.

Article no. 799301

#### 5 FTA360-S Adapter

Stable adapter with fine adjustment for convenient and accurate aiming, minimizes measurig deviation for indirect measuring, works in conjunction with Leica DISTO<sup>TM</sup> S910 and with tripods TRI 70, TRI 100 and TRI 200.

Article no. 828414

#### 6 LSA360-S Adapter

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









#### 7 GZM3 Target Plate

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

Article no. 820943

#### **8** GZM26 Target Plate, large

Grey side for short and brown side for long distance measurements.

Size: 210 × 297 mm (A4).

Article no. 723385

#### 9 GZM27 Stick-On Target Plate

Target plate held in place with kneading adhesive. Size:  $45 \times 100$  mm.

Article no. 723774

#### 10 GZM30 Target Plate

Stick-on target plates for placing on ground markers.

Size: 274 × 197 mm. **Article no. 766560** 

#### 11 POWERLINE 4 LIGHT Charger

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

Article no. 806679

#### 12 UC20 Universal Quick Charger

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

Article no. 788956

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

With three different lenses: laser visibility glasses, safety glasses and sun glasses.

Red lens glasses for improved visibility of the laser dot in bright rooms and outdoors up to 10–15 m.

## **Leica DISTO<sup>TM</sup> Apps**Bring the office to the construction site

The smart apps "Leica DISTO™ sketch" and "Leica DISTO™ transfer" are the ideal interface between the Leica DISTO™ with Bluetooth® and a smartphone or tablet. They allow sketches or photographs to be created and dimensioned quickly, or the transfer of measurements into a chart. The data is subsequently able to be sent directly to the office. This simplifies and speeds up working practices.



Leica DISTO™ sketch



Leica DISTO™ transfer



Software and Apps at a glance				
	Windows 7 www.disto.com	From Windows 8.1 www.disto.com	iOS (Instruments with Bluetooth® 4.0) Available on the App Store	Android from 4.3 (Instruments with Bluetooth® 4.0)  GETTON GOOGLE play
Leica DISTO™ D110 Leica DISTO™ D2 Leica DISTO™ D510 Leica DISTO™ D810 touch Leica DISTO™ S910 Bluetooth® 4.0	-	Leica DISTO™ transfer	Leica DISTO™ sketch	Leica DISTO™ transfer BLE  Leica DISTO™ sketch
Leica DISTO™ S910 WLAN	Leica DISTO™ transfer*	Leica DISTO™ transfer*		

<sup>\*</sup> incl. plugin for AutoCAD® and BricsCAD®

Further interesting Apps in the field of measurement can be found in the relevant Appstores.



## Leica 3D Disto

#### Versatility meets efficiency

#### 1 Leica 3D Disto with control unit

Leica 3D Disto and rugged control unit in one box. The control unit is especially designed for harsh jobsites and nevertheless small and handy for long working hours. The operation via touchscreen and coloured display ensures the convenient use.

Article no. 784357



## 2 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. 836546



2



#### 3 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





	Leica 3D Disto with 3D Disto software for Windows®	Leica 3D Disto with control unit
Leica 3D Disto	•	•
License for 3D Disto Software for Windows®	•	
Control unit		•
Remote control RM100	•	•
Power supply for 3D Disto	•	•
4 country specific power cords for worldwide use	•	•
Power supply for control unit		•
4 country specific adapter plugs for worldwide use		•
USB memory stick	•	•
USB WLAN stick	•	
Self-adhesive target points	•	•
Ruler (for measuring hidden points)	•	•
Leica GZM3 target plate	•	•
USB cable	1	2
Quickstart	•	•

Technical specifications	
Distance in m Tie distance accuracy in mm	10, 30, 50 m 1, 2, 4 mm
Range	0.5 to 50 m / 1.7 to 165 ft
Distance in m Ø of the laser dot in mm	10 m: ~7 mm x 7 mm 30 m: ~9 mm x 15 mm
Angle measuring range horizontal vertical	360° 250°
Self-levelling range tilt sensor	±3°
Digital pointfinder	1x, 2x, 4x, 8x zoom
File format	Import: DXF, CSV Export: DWG, DXF, TXT, CSV, JPG
Data interface	USB cable connection WLAN
Operating time	8 h
Batteries	Li-ion rechargeable
Charging time	7 h
Protection class	IP 54
Dimensions Ø x H	186,6 x 215,5 mm
Weight	2.8 kg
Range of remote control (IR)	30 m

System requirements for a Windows® device (not included in the scope of delivery)	
Operating system	Windows 7 or higher
Recommended screen resolution	Minimum 1000 × 680 pixels, desktop or touchscreen
	Use of the WLAN-USB stick included in the scope of supply
WLAN and data communication	If the Windows device has a mini or micro USB port: Use an adapter (not included in the scope of delivery), USB port and adapter must feature OTG (on-the-go) functionality
Further recommendations	Use of a pen for the touchscreen, replacement batteries, robust housing

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



## Line & Point Lasers

Set-up, switch on and start working.

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

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











## **Leica Lino Family**

Perfectly aligned and arranged

### Leica Lino P3 and P5

1 Lino P3

The lasers for quick setting-out and layout jobs and for easy upward and downward vertical aligning. Target plate, magnetic multifunction adapter, alkaline batteries (type AA,  $3 \times 1.5 \text{ V}$ ), pouch.

Article no. 777067 (Lino P3) Article no. 777068 (Lino P5) 000

## Leica Lino L2

2 Lino L2

The tried-and-tested cross line laser for easy horizontal and vertical aligning. Target plate, magnetic multifunction adapter, ball adapter for tripod, alkaline batteries (type AA,  $3 \times 1.5 \text{ V}$ ), carrying pouch.

Article no. 757225



2

### Leica Lino L2+

3 Lino L2+

The handy cross line laser with extra-long laser lines for horizontal and vertical aligning. Target plate, magnetic multifunction adapter, alkaline batteries (type AA,  $4 \times 1.5$ V), pouch.

Article no. 783711



## Leica Lino L2G+

4 Lino L2G+

The green cross line laser with up to 4-fold improved visibility. Target plate for green lasers, magnetic multifunctional adapter, alkaline batteries (type AA,  $4 \times 1.5V$ ), pouch.

Article no. 817856



## Leica Lino L2P5

5 Lino L2P5

The small and handy all-rounder for quick setting-out, layout and alignment jobs. Target plate, magnetic multifunction adapter, alkaline batteries (type AA,  $4 \times 1.5$ V), pouch.

Article no. 777069



## Leica Lino L360

6 Lino L360

Thanks to the projection of a precise 360° laser line this chargeable laser is ideal for transferring height measurements and reference points. Target plate red, mini tripod adapter, international charger with 4 plugs.

Article no. 790509

6



## Leica Lino L4P1

7 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-lon batteries with 24 hours of operation with normal alkaline batteries. Target plate red, Li-lon battery pack, international charger with 4 plugs, Alkaline battery tray, hard





Technical Data	Lino P3	Lino P5	Lino L2	Lino L2+	Lino L2G+	Lino L2P5	Lino L360	Lino L4P1
Range	Up to 15 m*				Up to 30 m*	Up to 15 m*	Up to 30 m*	up to 15 m*
Levelling accuracy @ 5 m	±1.5	5 mm	±1 mm	±1.5 mm			± 1 mm	
Self-levelling range			4° ±	±0.5° 3.5° ±0.5°				± 3°
Accuracy of plumb point @ 5 m	±1.5	5 mm		-		±1.5 mm	-	± 1 mm
Accuracy of horizontal line @ 5 m	-			±1.5 mm				± 1 mm
Vertical accuracy @ 3 m line length	- ±0.75 mm		5 mm	±1.5 mm	±0.7	5 mm	± 1 mm	
Beam direction	Up, down, forward	Up, down, forward, right, left	Vertical, horizontal	Vertical, horizontal	Vertical, horizontal, cross lines	Vertical, horizontal, up, down, right, left	Vertical, 360°, horizontal	3 vertical and 1 horizontal lines, 1 plumb down
Laser type	635 nm / Class 2				515 - 520 nm / Class 2	635 nm	/ Class 2	635 nm / Class 2
Protection class			IP	54			IP 65	IP 54
Battery	Type AA 3×1,5V		Type AA 4×1,5V			NiMH battery pack (recharge- able)	rechargeable Li-Ion batteries (and Alkaline batteries 4xAA, 1.5 V)	
Weight without batteries	310 g	320 g	321 g		370 g		1009 g	1173 g
PROTECT service offering	Manufacturer's Warranty: Lifetime No Cost period: 2 plus 1 years with registration							

<sup>\*</sup> Depending on lighting conditions

## **Leica Lino Family**

Professional Lino packages

8 Leica DISTO™ D210 and Lino L2 case – The professional package for easy measuring and alignment

The laser distance meter Leica DISTO™ D210, the cross line laser Lino L2 and the tripod TRI 70 are stored safely and ready-to-use in the robust, attractive and functional carrying case.

Article no. 806656



9 Leica Lino L2P5 Pro Case – The complete solution for interior applications

Leica Lino L2P5 point and cross line laser, target plate, magnetic multifunction adapter, pouch, Leica TRI 70 tripod, charger incl. 4 rechargeable NiMH batteries, Leica carrying case.

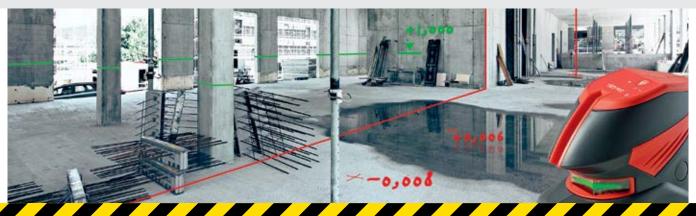
Article no. 820685



10 Leica Lino L2G+ Pro Case - See the difference of green visibility

Leica Lino L2G+ cross line laser with green beam, target plate, magnetic multifunction adapter, pouch, Leica TRI 70 tripod, charger incl. 4 rechargeable NiMH batteries, Leica carrying case.





## 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, L2+, L2P5, L360, L4P1.

Article no. 838757

#### 2 Receiver RVL 100

An acoustic signal and a visual signal are provided for finding the line outdoors. 2 large displays make it easy to find the line at a distance up to 80 m. The clamp can be attached quickly by magnets.

Compatible with Lino L2, L2+, L2P5, L360, L4P1.

Article no. 784962

#### 3 Wall Bracket

Wall and ceiling adapter with 1/4" screw, of universal application thanks to screw fastening. Compatible with L2, L2+, L2P5, P3, P5, L360, L4P1.

Article no. 758839

#### 4 CLR290 Clamp Rod

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

Article no. 761762

#### 5 TRI 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

#### 6 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<sup>TM</sup> and Lino.

Article no. 757938

#### 7 POWERLINE 4 LIGHT Charger

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





## **Interior Lasers**

#### Strong performance on all levels.

Leica Roteo rotating lasers are truly multi-talented performers. Whether on ceilings or walls, on the floor or on a tripod they allow you to work precisely on many indoor and outdoor tasks in which levelling or aligning is required.



## Leica Roteo 20HV

#### The ideal entry level model

The Leica Roteo 20HV is the ideal rotating laser for basic users. Its easy-to-understand keypad is intuitive to operate. The package includes a complete set of accessories for interior applications with remote control, wall mount bracket and target plate.

#### 1 Roteo 20HV Package

Leica Roteo 20HV rotating laser, manual wall mount bracket, RC360 remote control, battery (AA) for the remote control, battery holder for alkaline batteries, red target plate, red laser glasses and batteries for laser.

Article no. 772789



## Leica Roteo 35

#### The all-in-one rotating laser

The Leica Roteo 35 impresses everyone with its powerful features and complete set of accessories for every application, especially for interior jobs. The wall mount bracket allows convenient motorised control of the laser beam height by using the combined remote control/detector or by manual adjustment.

#### 2 Roteo 35 Package

Leica Roteo 35 WMR rotating laser, motorised wall mount, RRC360 combined remote control/ detector unit with clamp, 9V battery for the combined unit, battery holder for alkaline batteries, rechargeable batteries, international charger, red target plate and red laser glasses.

Article no. 765752



## Leica Roteo 35G

#### Top visibility and working distance

The Leica Roteo 35G has all the characteristics of the Leica Roteo 35. In addition, it has a green laser beam for better visibility in very bright conditions and over long distances. The pioneering green laser beam is four times more visible to the human eye, so with this laser you have the best possible visibility.

#### 3 Roteo 35G Package

Leica Roteo 35G rotating laser, motorised wall mount, RRC350G combined remote control/ detector unit with clamp, 9V battery for the combined unit, battery holder for alkaline batteries, rechargeable batteries, international charger, green target plate and green laser glasses.



Technical Data	Roteo 20HV	Roteo 35	Roteo 35G			
Range	Up to 150 m radius with laser receiver					
Self-levelling accuracy		±3 mm at 30 m				
Automatic self-levelling laser		Horizontal, vertical				
Self-levelling range		±4.5°				
Rotation speed		Variable 0, 150, 300, 450, 600 rpm				
Scanning angle		Variable between 2° and 36°				
Wall mount bracket	Manual	Moto	rised			
Dimensions laser (H × W × D)	189 x 136 x 208 mm (without wall mount bracket)					
Weight with batteries	1.7 kg					
Laser type	635 nm / Class 3R 532 nm / Green / Class 3R					
Battery types	Alkaline D cells, $2 \times 1.5 \text{ V}$	lls, 2 × 1.5 V attery pack (NiMH)				
Battery life	(alkaline batteries) Up to 160 hours (alkaline Up to 40 hours		25 hours (rechargeable), Up to 40 hours (alkaline batteries)			
PROTECT service offering	Manufacturer's Warranty: Lifetime No Cost period: 2 plus 1 years with registration					

#### **Leica Roteo Accessories**

R250 Laser Detector with Clamp for Roteo 20HV/35

For locating the red reference laser beam.

Article no. 772793

RRC350 Combined Remote Control/Detector with Clamp for Roteo 20HV/35

For locating the red reference laser beam.

Article no. 762771

RRC350G Combined Remote Control/Detector with Clamp for Roteo 35G

Article no. 772795

2 RC360 Remote Control for Roteo 20HV/35/35G

Article no. 833120

3 CTP106-1 Aluminium Tripod

Light-weight with shoulder strap and side clamp screws.

Article no. 789913

4 CET103 Crank-Head Tripod

Professional, multifunctional aluminium elevator tripod with shoulder strap, fast clamps and bubble, min. working height 84 cm, max.extension 246 cm (incl.extendable centre column), with mm-scale, exchangeable rubber feet.





## **Construction Lasers**

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

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

Construction-tough components have all undergone rigorous testing to assure long life under harsh conditions.



**28–29** Leica Rugby 800 Series



**30–31** Leica Rugby 600 Series



**33** Leica Piper 100/200

## Leica Rugby 800 Series

The toughest construction lasers on site

## Leica Rugby 810

Levelling made easy

Leica Rugby 810 – A one-button, self-levelling, horizontal laser (single axis, manual slope when used with the A240 Manual Slope Adapter).

1 Rugby 810 Package with Rod Eye 140, Classic Receiver

Rugby 810 with carrying case, Rod Eye 140, Classic receiver, charger and rechargeable Lithium-Ion batteries.

Article no. 6009875

Additional packages available.



## Leica Rugby 820

Unbeatable with slopes

Leica Rugby 820 – An accurate, easy-to-use, self-levelling, horizontal laser with manual grade control. The 820 can be used with the Rod Eye 180 for automatic slope setting using the Smart Target feature and with the RC800 remote for simple dial-in of grades.

Rugby 820 Package with Rod Eye 160, Digital Receiver

Rugby 820 with carrying case, Rod Eye 160, Digital receiver, charger and rechargeable Lithium-Ion batteries.

Article no. 6006014

Additional packages available.



2

## Leica Rugby 840

The laser that tackles it all

The Rugby 840 – A multi-purpose, self-levelling, horizontal/vertical laser. The 840 can be used with the Rod Eye 180 for automatic setting of slopes, batter boards and facade installations using the Smart Target feature and with the RC800 remote for simple dial-in of grades.

Rugby 840 Package with RE 180 Receiver and RC400/RC800 Remotes

Rugby 840 with carrying case, Rod Eye 180, Digital RF receiver, RC400 remote, RC800 remote, charger and rechargeable Lithium-Ion batteries.

Article no. 6010757

Additional packages available.









Technical Data	Rugby 810	Rugby 820	Rugby 840	
Functionality	Self-levelling horizontal, single manual slope (with slope adapter)	Self-levelling horizontal, with dual axis manual slope	Self-levelling horizontal, vertical, 90° with dual axis manual slope	
Smart Targeting			•	
Smart Lock		•	•	
Operating range (diameter)	1.300 m	1.300 m	1.300 m	
Self-levelling accuracy		±1.5 mm at 30 m		
Self-levelling range				
H.I. elevation alert	•	•	•	
Rotation speeds	10	0, 2, 5, 10 rps		
Scanning modes		10°, 45°, 90°		
Remote control / radius		RC800 / 100 m	RC400 / 100 m	
Laser diode type / class	635 nm	635 nm / Class 2		
Dimensions (HWD)	237 × 240 × 196 mm			
Weight with battery		3.0 kg		
Batteries (alkaline / rechargeable)		Four D-cells / Li-lon pack (A800)		
Battery life (alkaline / rechargeable)	60 hours / 50 hours @ 20°C			
Environmental standard				
Operating temperature range	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C	
PROTECT service offering		Manufacturer's Warranty: Lifetime No Cost period: 5 years Knockdown Warranty: 2 years		

## 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).

1 Rugby 610 Package with Rod Eye Basic Receiver

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

Article no. 6008610

Additional packages available.



1

## Leica Rugby 620

Simple and reliable

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

2 Rugby 620 Package with Rod Eye Basic Receiver

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

Article no. 6008617

Additional packages available



2

## Leica Rugby 640

Versatile inside and out

The Rugby 640 – A multi-purpose, self-levelling, horizontal/vertical laser for interior and general construction applications.

Rugby 640 Package with Rod Eye Basic Receiver

Rugby 640 with carrying case, Rod Eye Basic receiver, charger and rechargeable Lithium-Ion batteries.

Article no. 6008619

Additional packages available.









Technical Data	Rugby 610	Rugby 620	Rugby 640	
Functionality	Self-levelling horizontal, single manual slope (with slope adapter)	Self-levelling horizontal, with dual axis manual slope	Self-levelling horizontal, vertical, 90° with dual axis manual slope	
Range (diameter) with RE Basic	500 m	600 m	500 m	
Range (diameter) with RE 140/160		1.100 m		
Self-levelling accuracy	±2.2 mm @ 30 m	±2.2 mm @ 30 m	±1.5 mm at 30 m	
Self-levelling range		±5°		
H.I. elevation alert		•		
Rotation speeds	10 rps	10 rps	0, 2, 5, 10 rps	
Scanning modes			10°, 45°, 90°	
Remote control / radius			RC400 / 100 m	
Laser diode type / class	635 nm / Class 1	635 nm / Class 1	635 nm / Class 2	
Dimensions (HWD)		212 × 239 × 192 mm		
Weight with battery	2.4 kg	2.6	kg	
Batteries (alkaline / rechargeable)	Four D-cells / Li-Ion pack (A600)			
Battery life (alkaline / rechargeable)	60 hours / 40 hours @ 20°C			
Environmental standard		IP 67		
Operating temperature range	-10°C to +50°C	-20°C to +50°C	-20°C to +50°C	
PROTECT service offering		Manufacturer's Warranty: Lifetime No Cost period: 3 years		

## **Rugby Batteries**

A600 Li-lon Battery Pack, 4.8 Ah (for Rugby 600 series)

Article no. 790415

A800 Li-Ion Battery Pack, 7.2 Ah (for Rugby 800 series)

Article no. 790416

A100 Li-Ion Charger (for Rugby 600/800 series)

Article no. 790417

A150 Alkaline Pack (for Rugby 600/800 series)

## Rugby 600 & 800 Series Accessories

1 RC400 Remote Control

Operates with Rugby 840 / 640.

Article no. 790352

7 RC800 Remote Control

Operates with Rugby 820 / 840 / 870 / 880

Article no. 840706

3 A280 Façade Adapter Kit

Used with Rugby 840 / 640.

Article no. 799204

4 A220 Batter Board Clamp

Used with Rugby 840 / 640.

Article no. 790432

5 A240 Manual Slope Adapter

Used with Rugby 810 / 610.

Article no. 790434

6 A200 Wall Mount Bracket

Used with Rugby 640.

Article no. 790421

7 A210 Ceiling Grid Target

Used with Rugby 640.

Article no. 732791

**Rugby Power Solutions** 

1 A130 12 V Battery Cable, 4.5 m

Charge and run from auto battery.

Article no. 790418

2 A140 Car Adapter Cable, 1 m

Charge inside the vehicle while driving.

Article no. 797750

3 A170 Solar panel and Case

Operates with Rugby 600 / 800 series. Soft case attaches directly to the Rugby case.

























## **Leica Piper 100/200**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 the only pipe laser that fits inside a 100 mm (4 inch) pipe.



Piper 100, remote, target, Li-ion battery. Charger, car adapter cable and carrying case.

Article no. 748704



Piper 200, remote, target, Li-ion battery. Charger, car adapter cable and carrying case.

Article no. 748710



## Leica Piper Accessories

IR Remote Control

Article no. 746157

Target Assembly

Article no. 725858









Target Assembly, 100 mm / 4"

Article no. 815613

Trivet Assembly









Technical Data	Piper 100 / 200			
Laser type	635 nm (red), laser class 3R			
Laser output	4.75 mW maximum			
Working range	200 m			
Grade range	-10% to +25%			
Self-levelling range	-15% to +30%			
Line movement	6 m at 30 m			
Battery type*	Lithium-Ion, 7.4 V/3.8 Ah			
Operation/charge	40 h/4 h			
Operating temperature range	-20°C to +50°C			
Dimensions (diameter × length)	96 × 267 mm			
Weight	2 kg			
Construction	Cast aluminium			
Environmental standard	IPX8			
Wireless remote	Front, up to 150 m – Back, up to 10 m			
PROTECT service offering	Manufacturer's Warranty: Lifetime No Cost period: 2 years / extendable by 3 years if purchased			

<sup>\*</sup> Battery life is dependent upon environmental conditions



**Leica Rugby Receivers** 

1 Rod Eye Basic and Bracket

Simple, affordable, good value.

Article no. 769811

2 Rod Eye 140 Classic and Bracket

Standard receiver with arrow display.

Article no. 789923

Rod Eye 160 Digital and Bracket

Great receiver with digital readout.

Article no. 789924

4 Rod Eye 180 Digital RF and Bracket

Digital receiver with Smart functions used with the Rugby 820/840/870/880.









Technical Data	Rod Eye Basic	Rod Eye 140 Classic	Rod Eye 160 Digital	Rod Eye 180 Digital RF	
Smart Targeting, Smart Lock				•	
Working diameter	600 m	1.350 m			
(laser dependent)		2022			
Detection window	36 mm	120 mm			
Digital readout / height		■ / 90 mm			
Digital readout / units		mm, cm, in, frac, ft			
Detectable spectrum	600 nm to 800 nm				
Automatic shutoff	10 minutes				
Audio volumes	High / Low / Off	High / Low / Off	High / Med / Low / Off		
Arrow display	5 channels	9 channels	15 channels		
Detection accuracies	Fine ± 1 mm Coarse ± 3 mm	Fine ± 1 mm Medium ± 2 mm Coarse ± 3 mm	Very fine $\pm$ 0.5 mm    Fine $\pm$ 1 mm    Medium $\pm$ 2 mm    Coarse $\pm$ 3 mm    Very Coarse $\pm$ 5 mm		
LED display		•	•	•	
Anti-strobe protection		•	•	•	
Memory, last beam strike		•	•	•	
Beam finding, double beep		•	•		
Laser low battery indicator		•	•	•	
Environmental standard	IP 66	IP 67			
Battery life (hours)	50+ (1x 9V type)	50+ (2x AA type)			
Dimensions (HWD)	150 × 80 × 35 mm	173 × 76 × 29 mm			
Operating temperature range		-20°C to +50°C			
Warranty	1 year	3 years			

Technical Data	LMR240	LMR360	MC200 Depthmaster
Range	250 m	200 m	200 m
Reception	240°	360°	200°
Capture window	15 cm	25 cm	21 cm
Accuracy (fine)	1.5 - 6 mm	6 mm	±4 mm
Accuracy (coarse)	10 – 15 mm	12 mm	±12 mm
Environmental standard	IP 67	IP 67	IP 67
Battery type	3 × AA batteries	NiMH rechargeable	NiCd rechargeable (NiMH Q3/14)
Battery life	120 - 160 hours	30 hours	> 48 hours
Weight	1.9 kg	1.8 kg	2.4 kg
Mounting	Magnetic	Magnetic / Clamps	Magnetic / Clamps
Remote display	-	•	-
Remote range	-	30 m	-

## 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.



Package includes Depthmaster with carrying case, battery pack NiMH for Depthmaster, magnetic bracket, charger and user manual.

Article no. 742440

2 Depthmaster Excavator Receiver with Clamp-on Brackets

Package includes Depthmaster with carrying case, battery pack NiMH for Depthmaster, clamp-on bracket (2×), 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.

3 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.

4 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







Leica Geosystems offers grade lasers suitable for jobs of any size.

They can be used for applications requiring accurate grade control such as building pads, parking lots and site preparation.

The Rugby 670 and 680 are semi-automatic lasers designed for the contractor that works mostly with flat work, but occasionally requires to level to a slope.

The Rugby 870 and 880 are fully automatic grade lasers for level, single and dual slopes. The Rugby 880 has the additional capability to work in the laying down position for vertical plane set-ups. Both lasers have smart features for slope catching, monitoring, axis alignment and more.

The Rugby 320, 410 and 420 are heavy duty, fully automatic grade lasers for level, single and dual slopes designed for larger applications and increased stability over time and temperature.



**38–39** Leica Rugby 670 / 680



**38–39** Leica Rugby 870 / 880



**40–41** Leica Rugby 320 / 410 / 420

### Leica Grade Lasers

Unbeatable with slopes

### Leica Rugby 670

Semi-automatic, single grade laser

The Rugby 670 is a semi-automatic, single slope laser designed for the contractor that does mostly flat work, but occasionally needs to create a single slope such as a driveway.

1 Rugby 670 Package with Rod Eye Basic Receiver

Rugby 670 with carrying case, Rod Eye Basic receiver and rechargeable Lithium-Ion batteries.

Article no. 6008621

Additional packages available.



1

### 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.

2 Rugby 680 Package with Rod Eye Basic Receiver

Rugby 680 with carrying case, Rod Eye Basic receiver and rechargeable Lithium-Ion batteries.

Article no. 6008623

Additional packages available.



2

### Leica Rugby 870

Fully-automatic, single grade laser

The Rugby 870 is a fully-automatic, single grade laser for the general construction contractor that needs a level or single slope for flat work, site preparation, septic installation, trenching and more. Available with a two-way remote control.

3 Rugby 870 package with Rod Eye 180 Receiver and RC800 Remote

Rugby 870 with with carrying case, Rod Eye 180 Digital RF receiver, RC800 remote, Li-lon battery and charger.

Article no. 6006038

Additional packages available.



3

# **Leica Rugby 880**Fully-automatic, dual grade laser

The Rugby 880 is a fully-automatic, dual grade laser for the general construction contractor that needs a level, single or dual slope for flat work, site preparation, parking areas and more. Available with a two-way remote control.

4 Rugby 880 package with Rod Eye 180 Receiver and RC800 Remote

Rugby 880 with with carrying case, Rod Eye 180 Digital RF receiver, RC800 remote, Li-Ion battery and charger.

Article no. 6006052

Additional packages available.











Technical Data	Rugby 670	Rugby 680	Rugby 870	Rugby 880	
Functionality	Semi-automatic, self-levelling horizontal with dial-in, single axis	Semi-automatic, self-levelling horizontal with dial-in, dual axis	Fully automatic, self-levelling horizontal and grade, single axis	Fully automatic, self-levelling horizontal and grade, dual axis	
RF remote capable (radius)			300	) m	
Grade range	±8% SG	±8% DG	±15% SG	±15% in either axis ±10% and ±3% in both axes	
Range (diameter)	800 m (with RE Basic), 11	100 m (with RE 140/160)	1300 m (RE 140/160/180)		
Self-levelling accuracy*		±1.5 mm	mm @ 30 m		
Self-levelling range	±	5°	±6°		
H.I. elevation alert					
Bump alert		•			
Rotation speeds	10	rps	5, 10	) rps	
Laser diode type / class	635 nm	/Class 1	635 nm/Class 1		
Battery life (alkaline / Li-Ion)**	60 hours / 40 hours @ 20°C		60 hours / 45 hours @ 20°C		
Environmental standard	IP 67		IP68 / MIL Standard 810G		
PROTECT service offering		Varranty: Lifetime iod: 3 years	Manufacturer's Warranty: Lifetime No Cost period: 5 years Knockdown warranty: 2 years		

<sup>\*</sup> Accuracy is defined at +25°C

<sup>\*\*</sup> Battery life is dependent upon environmental conditions

### Leica Grade Lasers

The toughest players on big fields

# **Leica Rugby 320SG**The heavy-duty single grade laser

The Leica Rugby 320SG is a fully automatic single grade laser for level and single slope applications.

Rugby 320SG Package with Rod Eye 160, Digital Receiver

Rugby 320SG with carrying case, Rod Eye 160 Digital receiver and rechargeable NiMH batteries.

Article no. 6003517

Additional packages available..



### Leica Rugby 410DG

The heavy-duty dual grade laser

The Leica Rugby 410DG is a fully-automatic dual grade laser for level, single and dual slope applications.

Rugby 410DG Package with Rod Eye Digital

Rugby 410DG with carrying case, Rod Eye 160 Digital receiver and rechargeable NiMH batteries.

Article no. 6003522



### Leica Rugby 420DG

The heavy-duty dual grade laser with temperature stabilization

The Leica Rugby 420DG is a fully-automatic dual grade laser for level, single and dual slope applications. It is best suited for agriculture applications where long range, accuracy and temperature stability is required.

Rugby 420DG Package with Rod Eye 160, Digital Receiver

Rugby 420DG with carrying case, Rod Eye 160 Digital receiver and rechargeable NiMH batteries.

Article no. 6003530 Additional packages available.



Technical Data	Rugby 320SG	Rugby 410DG	Rugby 420DG			
Applications (trades & tasks)	General construction, civil engineering, installing septic and gravity flow pipes for drainage, Machine control, agricultural applications such as land levelling or tilling					
Working range (diameter)	900 m 800 m 1100 m					
Accuracy		±1.5 mm @ 30 m				
Self-levelling		Horizontal + Grade				
Grade capability	-5 to +25% in one axis	-5 to +25 % in either axis (-5 to +15 % in both axes)				
Laser type	635 nm / Class 2	780 nm / Class 1	635 nm / Class 2			
Environmental standard		IP 57				
Operating temperature	-20°C to +50°C					
Weight	5 kg					
PROTECT service offering	No Cost peri	Manufacturer's Warranty: Lifetime od: 2 years / extendable by 3 years	if purchased			

### **Grade Laser Batteries**

NiMH Battery Pack for Rugby 320, 410 and 420

Article no. 739855

Universal Charger for Rugby 320, 410 and 420

Article no. 741349

3 A800 Li-ion Battery Pack, 7.2 Ah for Rugby 870 / 880

Article no. 790416

4 A150 Alkaline Pack for Rugby 870 / 880

Article no. 790419

5 A100 Li-Ion Charger for Rugby 870 / 880

Article no. 790417

### **Grade Laser Accessories**

1 RC800 Remote Control

Operates with Rugby 870 / 880 / 840 / 820.

Article no. 840706

2 RF Remote Control, LR

Used with Rugby 410 / 420.

Article no. 765668

3 Scope and Mount Assy

Used with Rugby 320 / 410 / 420 / 870 / 880.

Article no. 739870





2





# **Optical Levels**

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

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



44 Leica NA300 Series



45 Leica NA500 Series



46 Leica NA700 Series



47 Leica NA2 / NAK2

### Leica NA300 Series

Unique. Accurate. Simple.

Professionals face many obstructions on site. Whatever the levelling challenge, Leica NA300 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 NA300 Series are your trusted partners for accurate measurements every time.



1 NA320

Automatic level in carry case, with 20× magnification.

Article no. 840381

NA324

Automatic level in carry case, with 24× magnification.

Article no. 840382

NA332

Automatic level in carry case, with 32× magnification.

Article no. 840383

Technical Data	NA320	NA324	NA332		
Magnification	20×	24×	32x		
Angle measurement		360°			
Standard deviation (per km double-run)	2.5 mm	1.8 mm			
Shortest target distance	<1.0 m				
Dust / Water protection	IP 54				
Working temperature	-20°C to +40°C				
Weight	1.5 kg				
PROTECT service offering	Manufacturer's Warranty: Lifetime No Cost period: 1 year				

### Leica NA300 and NA500 Accessories

1 CTP104 Aluminium Tripod

CTP104, Aluminium tripod with shoulder strap and fast clamps, medium weight. Complies with NA Levels

Article no. 767710

2 CTP106-2 Aluminium Tripod

Light-weight tripod with shoulder strap and side clamp screws. Complies with NA Levels.

Article no. 815503

3 CLR101 Telescopic Level Staff

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

Article no. 727587

**4** CLR102 Telescopic Level Staff

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

### 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.



#### 1 NA520

Automatic level in carry case, with 20× magnification.

Article no. 840384

#### NA524

Automatic level in carry case, with 24× magnification.

Article no. 840385

#### NA532

Automatic level in carry case, with 32× magnification.

Technical Data	NA520	NA524	NA532		
Magnification	20×	24×	32x		
Angle measurement		360°			
Standard deviation (per km double-run)	2.5 mm 1.9 mm 1.6 mm				
Shortest target distance		<1.0 m			
Dust / Water protection	IP 56				
Working temperature	-20°C to +50°C				
Weight	1.5 kg				
PROTECT service offering		Manufacturer's Warranty: Lifetime No Cost period: 1 year			



### Leica NA700 Series

Built for builders, engineers and surveyors

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



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

#### 1 NA720

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

Article no. 641982

#### NA724

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

Article no. 641983

#### NA728

Automatic Level 28x telescopic magnification, precision compensator. The all-rounder. For building or engineering surveys.

Article no. 641984

#### NA730 / NA730 plus

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

Article no. 641985 / 833190

Technical Data	NA720	NA724	NA728	NA730	NA730 plus
Magnification	20×	24x	28×	30×	
Angle measurement	360°/400gon				
Standard deviation (per km double-run)	2.5 mm	2.0 mm	1.5 mm	1.2 mm	0.7 mm
Dust / Water protection	IP 57				
Working temperature	−20°C to +50°C				
Weight	1.6 kg				
PROTECT service offering	Manufacturer's Warranty: Lifetime No Cost period: 2 plus 1 years with registration				

### Accessories

#### 1 CTP104 Aluminium Tripod

Medium duty aluminium tripod with carrying strap and fast clamps.

Article no. 767710

#### 2 CLR102 Telescopic Level Staff

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



### Leica NA2/NAK2

### The classical level

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

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



#### 1 NA2

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

Article no. 352036

#### NAK2 (400gon)

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

Article no. 352039

#### NAK2 (360 degrees)

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

Article no. 352038

Technical Data	NA2	NAK2			
Magnification	32× FOK73 eyepiece (optional): 40×	standard: 32× FOK73 eyepiece (optional): 40×			
Angle measurement	- 360°/400gon				
Standard deviation (per km double-run)	0.7 mm/km (0.3 mm with parallel-plate micrometer)				
Dust / Water protection	IP 53				
Working temperature	−20°C to +50°C				
Weight	2.4 kg				
PROTECT service offering	Manufacturer's Warranty: Lifetime No Cost period: 3 years				

### Accessories

1 GPM3 Parallel-Plate Micrometer

In container, measuring range 10 mm.

Article no. 356121

**2** GOA2 Autocollimation Eyepiece

For all instruments.

Article no. 199899





**3** GFZ3 Diagonal Eyepiece

Allows steep sights.

Article no. 734514

4 FOK73 40x Eyepiece

For NA2/NAK2, exchangeable against standard eveniece.







# **Digital Levels**

Levelling can be so easy with digital levels from Leica Geosystems.

Push the button and heights, height differences and distances are automatically displayed. There will be no more misreading and interpretation errors in reading the staff.

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



**50–51** Leica Sprinter Series

### Leica Sprinter 50

One-touch does it all

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



Sprinter 50

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

Article no. 762628

Leica Sprinter 150/150M/250M

Advanced opportunities

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



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

Article no. 762629

#### Sprinter 150M

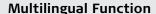
Electronic level with internal memory, standard deviation 1.5 mm, includes container, strap, adjustment tools, user manual, 4x AA batteries, USB cable and CD.

Article no. 762630

#### Sprinter 250M

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

Article no. 762631



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







Technical Data	Sprinter 50 Sprinter 150/150M Sprinter 150/150M		Sprinter 250M			
Height accuracies	Standard deviation height measurement per 1 km double run (ISO 17123-2)					
- Electronic measurement*	2.0 mm 1.5 mm 1.0/0.7* mm					
- Optical measurement	With standa	rd aluminum E-scale/Numeral staff: 2.5 m	m			
- Single staff reading	Standard deviation:	0.6 mm (electronic) and 1.2 mm (optical)	) at 30 m			
Distance accuracies	Standard deviation distance measurer	ment 10 mm for D < 10 m and (Distance i	in m × 0.001) for D > 10 m			
Range		2 –100 m (electronic)				
Measuring modes		Single and Trac	king			
Time for single measurement		<3 sec				
Compensator	Magnet dampe	ed pendulum compensator (range +/- 10 i	min)			
Telescope		Magnification (optical) 24×				
Data storage		Up to 2'000 points (only 150M)	Up to 2'000 points			
Environmental conditions	IP 55					
Power supply	AA dry cells (4 × LR6/AA/AM3 1.5 V)					
Weight	<2.5 kg					
PROTECT service offering	N	lanufacturer's Warranty: Lifetime No Cost period: 2 years				

<sup>\* 0.7</sup> mm can be achieved with Sprinter fibre glass barcode staff

### **Leica Sprinter Accessories**

#### 1 GSS111 Dual Face Telescopic Levelling Staff

5 m, 4 sections, Sprinter barcode/E-Scale cm-graduation, with circular bubble, in transport bag (Std. version).

Article no. 741882

#### **GSS113** Fibreglass Dual Face Staff

Fibreglass dual face staff 3 m, 1 section, Sprinter barcode/E-scale cm graduation, with circular bubble and transport bag.

Article no. 764452

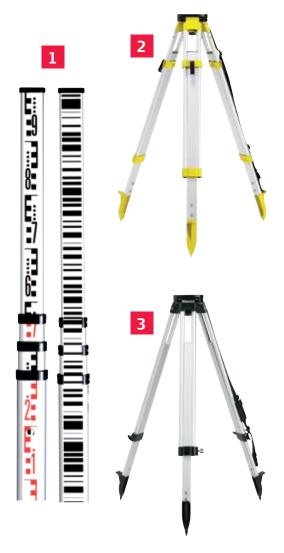
#### 2 CTP104 Aluminium Tripod

Medium duty aluminium tripod with carrying strap and fast clamps.

Article no. 767710

#### 3 CTP106-2 Aluminium Tripod

Light-weight tripod with shoulder strap and side clamp screws. Complies with NA Levels.





# **Total Stations**

Still using a measuring tape or an optical theodolite?

Do you need a tool that fulfils all measuring tasks on your construction site with ease, regardless of your profession?

The Leica Builder does it all for you.







**54–55** Leica Builder Series

### Leica Builder Series

For anybody working on or around a site with the need of a simple, intuitive, yet innovative, long-lasting and powerful measuring tool. Regardless of your profession, the Builder will amazingly accelerate your work flow. From simple tasks to professional all-day use, the Builder Series offers a scalable product family that exactly meets your needs.

#### 1 Builder 109 Set

Theodolite with laser plummet, 1 keyboard, tribrach, Li-Ion batterie, charger, user manual and carry case.

Article no. 772727

#### 2 Builder 209 Set

Total Station with EDM, serial RS232 interface, laser plummet, 1 keyboard, tribrach, 2× Li-Ion battery, charger, flat prism, reflector pole, user manual and carry case.

Article no. 772729

#### 3 Builder 309 Set

Total Station with EDM, internal memory, serial RS232 interface, USB compartment, laser plummet, 1 keyboard, tribrach, 2× Li-lon battery, charger, flat prism, reflector pole, USB to Mini-USB transfer cable, user manual and carry case.

Article no. 772731

#### 4 Builder 409 Set

Total Station with EDM, internal memory, serial RS232 interface, USB compartment, laser plummet, 1 alphanumeric keyboard, tribrach, 2× Li-lon battery, charger, TrueZero prism, reflector pole, USB to Mini-USB transfer cable, user manual and carry case.

Article no. 772733

#### 5 Builder 509 Set

Total Station with multifunctional EDM, internal memory, serial RS232 interface, USB compartment, Bluetooth®, laser plummet, 1 alphanumeric keyboard, tribrach, 2× Li-lon battery, charger, TrueZero prism, reflector pole, USB to Mini-USB transfer cable, user manual and carry case.

Article no. 772735

#### Accessories supplied with / optional

#### 6 Connect Leica CC55 Field Controller

Load your preferred software tool and keep working as usual. Article no. 817340









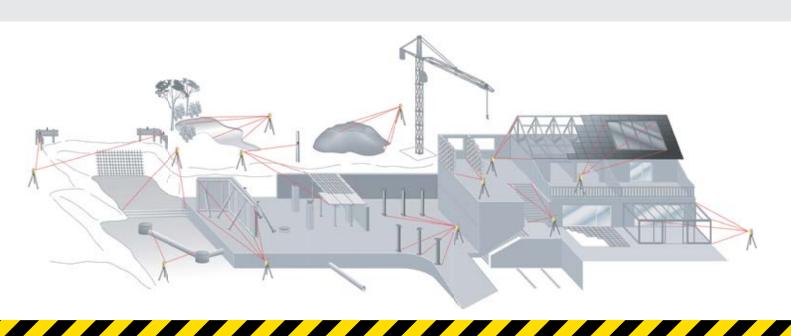






Technical Data	Builder 100	Builder 200	Builder 300	Builder 400	Builder 500	
Full Power Site Software					•	
Wireless communication						
Full RedDot range						
Prism measurement mode						
MEAS / REC switch key					•	
Cell-phone style use						
Industrial USB memory stick			•			
Volumes calculation			•			
Data import / exportt to USB stick			•			
Direct DXF download						
1-Person station		•	•			
Tracking mode			•			
PC / Handheld interface		•	•		•	
Laser distance measure		•	•			
Control line set-up		•	•		•	
Theft protection		•	•			
3 languages	•	•	•		•	
Levelling aid			•			
Dual axis compensator	•	•	•		•	
Laser plummet						
Data Storage / Communication						
Internal memory [points]	-	-	15'000	50'000	50'000	
Angle Measurement						
Accuracy/Option	9"/6"	9"/6"	9"/6"	9"/5"	9"/5"/3"	
Distance Measurement						
To glass prism				500 m (3'500 m)	500 m (3'500 m)	
Without reflector (90% reflective)	-	80 m	120 m	15 m	250 m	
To reflective tape (60 × 60 mm)	-	250 m	250 m	15 m	250 m	
Battery type / life	Li-lon/approx. 20 hours*					
Environmental standard	IP 55					
Warranty		1 year	/ up to 3 years with va	lid CCP		

<sup>\*</sup> Single meaurement every 30 seconds at 25°C with GEb221. Battery time may be shorter if battery is not new.





# Leica iCON

Fully understanding construction carried us beyond the ordinary.

Leica iCON is more than a new product line and a software package, it enables you to enhance your performance and increase your profitability through perfecting your construction workflow.



58 Leica iCON robot 50



59 Leica iCON gps 60



60 Leica iCON builder 60



61 Leica iCON robot 60



62-63 Leica iCON controllers

### Leica iCON robot 50

## Robotic total station for one-person operation

Save time and increase your productivity by doing layout work and as-built checks yourself. With Leica iCON robot 50 you don't need an operator at the instrument. The robotic total station can be operated from the field controller at the prism pole, at the point you need positioning.



iCON robot 55, 5" Robotic Total Station & iCON build Field Software & CC80 7" WIN Tablet

Article no. 6010009

iCON robot 55, 5" Robotic Total Station & iCON build Field Software & CC66 7" tablet PC with long-range Bluetooth® kit.

Article no. 6009102

iCON robot 55, 5" Robotic Total Station & iCON site Field Software & CC80 7" WIN Tablet

Article no. 6010011

iCON robot 55, 5" Robotic Total Station & iCON site Field Software & CC66 7" tablet PC with long-range Bluetooth $^\circ$  kit.

Article no. 6009104



All iCON Total Station kits contain these accessories:

- Total Station
- CF Card and 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 gps 60

Smart positioning on any construction site

Leica iCON gps 60 is a construction GNSS SmartAntenna for versatile positioning tasks specifically developed towards construction needs. Featuring superior GNSS technology and various integrated communication options, it meets all requirements for reliable and precise positioning work on site.

- Superior GNSS technology for maximum accuracy and reliability. Features Leica SmartTrack+ and Smart-Check+.
- Future-proof satellite tracking supports a wide range of satellite signals (GPS, GLONASS, Galileo, Beidou, ...)
- All-purpose GPS solution can be used as construction site GNSS Base, Rover or Net Rover, or in supervisor vehicle
- Unique flexibility for entry level machine control mounted inside a construction machine and off machine applications



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

Article no. 6006870

The iCON GNSS kits contain these accessories:

- iCG60 GNSS SmartAntenna
- Internal Satel or Intuicom Radio (optional)
- Radio antenna (optional)
- Radio antenna adapter (optional)
- Charger
- Batteries
- Pole
- CC80 or CC66 controller
- Bracket for controller
- Field Software
- Carry case







#### 1 iCON gps Rover Packages (build or site Field Software)

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

Article no. 6010196

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

Article no. 6010197

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

Article no. 6010201

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

Article no. 6010202

iCON gps 60 GNSS SmartAntenna Performance Kit; includes iCG60 Performance Package & iCON site Field Software & CC66 7" Tablet PC incl. LRBT & Pole Accessories

Article no. 6009086

iCON gps 60 GNSS SmartAntenna Performance Kit; includes iCG60 Performance Package & iCON build Field Software & CC66 7" Tablet PC incl. LBRT & Pole Accessories

### Leica iCON builder 60

#### One instrument for many tasks

With Leica iCON builder 60, construction layout has never been more professional. The intuitive user interface paired with the highest quality manual total station perfects any job.

### Leica iCON builder 60 packages:

#### 1 Kit with iCON builder 62

2" Manual Total Station & iCONstruct start kit software onboard, 500m reflectorless range, tribrach, 2× Li-Ion battery, charger, TrueZero prism, mini reflector pole, USB to Mini-USB transfer cable, USB memory stick, quick guide and carry case.

Article no. 6008666

#### 2 Kit with iCON builder 65

5" Manual Total Station & iCONstruct start kit software onboard, 500m reflectorless range, tribrach, 2× Li-lon battery, charger, TrueZero prism, mini reflector pole, USB to Mini-USB transfer cable, USB memory stick, quick guide and carry case.

Article no. 6008668

#### Kit with iCON builder 69

9" Manual Total Station & iCONstruct start kit software onboard, 500m reflectorless range, tribrach,  $2\times$  Li-lon battery, charger, TrueZero prism, mini reflector pole, USB to Mini-USB transfer cable, USB memory stick, quick guide and carry case.







### Leica iCON robot 60

#### One instrument for many tasks

Leica iCON robot 60 perfects one-person construction layout and 3D machine control. Its high performance tracking, innovative lock & find mechanisms and software that is tailored per work step, make it the ideal partner on site. The powerful iCONstruct field software used as remote control optimises the functionality.

#### Leica iCON robot 60 packages:

1 Kit with iCON robot 62 / iCON build / CC80

2" Robotic Total Station & iCON build Field Software & CC80 7" WIN Tablet.

Article no. 6010014

#### Kit with iCON robot 62 / iCON build / CC66

2" Robotic Total Station & iCON build Field Software & CC66 7" Tablet PC with long-range Bluetooth $^{\circ}$ .

Article no. 6006797

#### Kit with iCON robot 62 / iCON site / CC80

2" Robotic Total Station & iCON site Field Software & CC80 7" WIN Tablet.

Article no. 6010017

#### Kit with iCON robot 62 / iCON site / CC66

2" Robotic Total Station & iCON site Field Software & CC66 7" Tablet PC with long-range Bluetooth®.

Article no. 6006803



All iCON robot 60 kits contain these accessories:

- Total Station, iCONstruct Start Kit onboard software
- SD Card and 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 CC80

## Rugged, lightweight controller for uncompromising site work

Leica iCON CC80 controller is the world's thinnest and lightest fully-rugged 7" Windows® tablet. It is built to enable easy, mobile work on-site and increase worker productivity without compromise. Powered by Windows® 8.1 Pro and an Intel® Core i5 processor, Leica iCON CC80 features a long life, user-replaceable battery and a daylight readable multi-touchscreen with high sensitivity for easy operation in all conditions

- Large 7" sunlight readable multi-touchscreen for convenient operation
- Microsoft Windows® 8.1 operating system, enables3rd party applications as well
- Various wireless communication possibilities (Bluetooth®, Wi-Fi and integrated 3G/4G multi-carrier mobile broadband) for use with different sensors and internet access
- Fully rugged design for use in toughest conditions (MIL-STD-810G, IP65)
- Long life battery pack (up to 16 hours)
- Highly productive positioning work with Leica iCON site and Leica iCON build application software



1

#### 1 Leica iCON CC80

CC80-0, Rugged 7" Tablet PC, Win8.1, EU; Art. No. 833203

CC80-1, Rugged 7" Tablet PC, Win8.1, US; Art. No. 833204

CC80-2, Rugged 7" Tablet PC, Win8.1, CAN; Art. No. 833205

CC80-3, Rugged 7" Tablet PC, Win8.1, AUS/NZ; Art. No. 833206

CC80-4, Rugged 7" Tablet PC, Win8.1, RU; Art. No. 833207

CC80-5, Rugged 7" Tablet PC, Win8.1, JP; Art. No. 833208

Technical Data	iCON CC80			
Operating system	Microsoft Windows 8.1 Pro 64-bit			
CPU platform	Intel® Core™ i5-4302Y vPro™, 1.6 GHz up to 2.3 GHz			
Ram	4 GB DDR3			
Mass storage	128 GB SSD			
Display and Touch	7", 1024×800 resolution TFT, sunlight readable, capacitive touchscreen; 10-point multi-touch, supports gloved touch, gestures and capacitive stylus pen			
Communications	Integrated 3G/4G multi-carrier mobile broadband (depending on country variant), Intel® dual band wireless AC7260 Wi-Fi 802.11a/b/g/n/ac Bluetooth® v4.0 (Class 1) + DER, L1 GPS integrated (depending on country variant)			
I/O Ports	1× USB 3.0 port,1 x DC power input; Docking connector (24 pin); 1x audio out, mini-jack stereo; integrated microphone and speaker			
Battery	Li-lon "Long life" battery pack: 7.2V, typical 7100 mAh			
Operating time	8 h (max. load test with "Long life" battery pack)			
Weight	640 g (1.41 lbs), incl. "Long life" battery pack			
Camera	2 MP front webcam with microphone, 5 MP rear camera with auto focus and LED light			
Operating temperature	Specified: -10°C (14°F) to 50°C (122°F) Verified: -29°C (-20°F) to 60°C (140°F)			
Storage temperature	Specified: -20°C (-4°F) to 60°C (140°F) Verified: -51°C (-60°F) to 71°C (160°F)			
Humidity	95%			
Rain and dust	IP 65			
Drop	Free to plywood 26 drops from 1.5 m			
Vibration	MIL-STD-810G, Method 514.6, Procedure I, II			

### Leica iCON CC65 / 66

Versatile tablet PC's are designed to transport a user's office directly to the field

The rugged, lightweight device has a clear and easy-to-use 7" touchscreen designed to facilitate with data collection tasks on site, while at the same time communicating with the central office, real-time data transfer is made easy! The tablet PC's are designed for the most demanding working environments and protected against hazards on a construction site, allowing them to provide optimal results in all harsh conditions.

Both tablet PC's can be used as a handheld, mounted on a tripod or detail pole for data collection.

- Large 7" sunlight readable touchscreen display for convenient operation
- Windows 7 Ultimate Edition multilingual operating system
- Various communication possibilities (3 G modem, Bluetooth®, WLAN, LAN, USB, RS232) for the use with different sensors for different applications
- Leica iCON CC66 model features long-range Bluetooth®
- Highly productive positioning work with Leica iCON build and Leica iCON site application software



1

1 Leica iCON CC65/66

Article no. CC65: 818193 / CC66: 818194

Technical Data	iCON CC65/66
Operating system	Microsoft Windows 7 Ultimate + Microsoft License
CPU platform	Intel® ATOM N2600 1.6 GHz Dual Core
Ram	4 GB DDR3
Mass storage	128 GB SSD
Display	7", 1024×600 resolution TFT, sunlight readable resistive touchscreen
Communications	Bluetooth® v2.1/v4.0, Built-in Modem: Quad-band HSPA+, Quad-band GSM/GPRS/EDGE, CDMA, Wireless LAN: 802.11 b/g/n, Integrated u-blox®GPS
I/O Ports	2× USB 2.0 port, 1× RS-232 port, Gigabit LAN Ethernet, DC Power in, microSD Slot, audio out
Battery	2× Li-polymer battery, 5.2 Ah
Weight	1'100 gramm
Camera	5 Megapixel camera + LED flash
Operating temperature	-33°C to +63°C
Storage temperature	-40°C to +71°C
Humidity	95%
Rain and dust	IP 65
Drop	Free to concrete 26 drops from 1.2 m



# Cable Locators & Signal Transmitters

The Digisystem family of locators represent the latest design in cable location technology.

With state-of-the-art Digital Signal Processing (DSP) and intelligent software, the Leica Digisystem makes locating underground cables and pipes a simple and efficient task, increasing your safety on site and ultimately saving you time and money.



**66–67** Leica Digicat i-Series



**68–69** Leica Digicat xf-Series



70 Leica Digitex
Signal Transmitters

72 Leica ULTRA

74 Leica UTILIFINDER+

### Leica Digicat i-Series Locators

Safe and fast location of underground utilities

The Leica Digicat i-Series locators make ground surveys a simple and speedy task increasing on site safety. Defaulting to power mode, maximum sensitivity ensures operators are protected against lethal electrical cables, whilst additional modes are used to detect other buried utilities.

### Leica Digicat 500i

1 Digicat 500i

With its automatic controls and combined Auto mode, the Leica Digicat 500i locator has been specifically designed to reduce human error during the location process. Combined with its precise and reliable utility positioning, the Digicat 500i will prevent damage to underground utilities during excavation projects.

Article no. 50Hz 780225 / 60Hz 780226



### Leica Digicat 550i

2 Digicat 550i

The Leica Digicat 550i locator has the same functionality as the Digicat 500i, with the added benefit of depth estimation, when used in conjunction with either the Digitex 100t, 300t signal transmitter's or sonde with a compatible 8 kHz or 33 kHz output.

Article no. 50Hz 780231 / 60Hz 780232



### Leica Digicat 600i

3 Digicat 600i

The Leica Digicat 600i has the same functionality as the Digicat 500i with the added benefit of onboard memory and Bluetooth® connectivity. The onboard memory records information of how the Digicat 600i is used; this can then be uploaded using LOGiCAT software via Bluetooth® connectivity and additional analysis can identify operator trends, training requirements and how the locator was used following a near miss or utility strike.

Article no. 50Hz: 795939 / 60Hz: 795940



### Leica Digicat 650i

4 Digicat 650i

The Leica Digicat 650i locator has the same functionality as the Digicat 600i, with the added benefit of depth estimation, when used in conjunction with either the Digitex 100t, 300t signal transmitter's or sonde with a compatible 8 kHz or 33 kHz output.

Article no. 50Hz: 795941 / 60Hz: 795944



66

### Leica Digicat 700i

#### 5 Digicat 700i

The Leica Digicat 700i has the same functionality as the Digicat 600i with the added benefit of integrated GPS positioning. GPS technology and data logging delivers increased data on where, when and how the locator has been used. The data files can be uploaded using LOGICAT VU software via Bluetooth® connectivity and additional analysis can identify the position of use, site conditions, operator trends, training requirements and how the locator was used following a near miss or utility strike. The Digicat 700i can communicate with Apple, Android and Windows devices, PC, Laptop, GIS field controllers.

Article no. 50Hz: 821246 / 60Hz: 821247



### Leica Digicat 750i

#### 6 Digicat 750i

The Leica Digicat 750i locator has the same functionality as the Digicat 700i, with the added benefit of depth estimation, when used in conjunction with either the Digitex 100t, 300t signal transmitter's or sonde with a compatible 8 kHz or 33 kHz output.

Article no. 50Hz: 821248 / 60Hz: 821251



Technical Data	Digicat 500i	Digicat 550i	Digicat 600i	Digicat 650i	Digicat 700i	Digicat 750i
Frequency / Mode	Power mode 50 Hz or 60 Hz, Radio mode 15 kHz to 60 kHz, Transmitter mode 8 kHz, 33 kHz, Auto mode = Power + radio mode					
Depth	Powe	r to 3 m, Radio to 2 m	n, Transmitter mode –	Dependant on transm	nitter or Digimouse (So	onde)
Depth estimation	0.3 to 3 m       0.3 to 3 m       0.3         Sonde mode -       Sonde mode -       Sonde mode -         0.3 to 3 m       0.3 to 3 m       0.3         10% of depth in       10% of depth in       10% of depth in				Line mode – 0.3 to 3 m Sonde mode – 0.3 to 3 m 10% of depth in line or Sonde mode	
Protection	Conforms to IP 54					
Bluetooth®	Not available Enabled					
Windows compatible				Ye	25	
Android compatible				Ye	25	
Apple compatible					Y	es
Batteries			6 × AA alkaline (	IEC LR6 supplied)		
Battery life			40 hours intermit	tent use (at 20°C)		
Weight	2.7 kg including batteries					
Compatibility	CSV file compatibility program					
Memory size	32 MB memory 64 MB memory					
PROTECT service offering	Manufacturer's Warranty: Lifetime No Cost period: 1 year					
Applications (trades & tasks)	Street works, excava	tion contractors, fenc		aying contractors. ope cavation process.	rators tasked with avo	oiding utility damage

### Leica Digicat xf-Series Locators

Accurately locating buried utilities

The Leica Digicat xf-Series locators provide operators with additional 512 Hz and 640 Hz tracing modes, enabling operators to trace buried utilities over greater distances or to easily detect sewer – camera inspection systems. Additional features include Mode Lock – the locator starts in the last mode of operation Current Measurement when using the Leica Digitex xf signal transmitter and extended sonde depth.

### Leica Digicat 500i xf

1 Digicat 500i xf

With its automatic controls and additional tracing modes of 512 Hz and 640 Hz, the Leica Digicat 500i xf has been specifically designed to provide operators with a reliable solution to long distance tracing and the detection of camera – sewer inspection systems. Combined with its precise and reliable utility positioning, the Digicat 500i xf will trace buried utilities and sewer inspection systems with ease. The Leica Digitex 100t xf signal transmitter or the more powerful Digitex 300t xf will allow users to trace buried utilities easier than ever before.

Article no. 50Hz: 798640 / 60Hz: 798641



### Leica Digicat 550i xf

2 Digicat 550i xf

The Leica Digicat 550i xf has the same functionality as the Digicat 500i xf, with the added benefit of depth estimation, when used in conjunction with the Leica Digitex 100t xf, Digitex 300t xf signal transmitters or Sonde with a compatible 8 kHz, 33 kHz, 512 Hz or 640 Hz output.

Article no. 50Hz: 798642 / 60Hz: 798643



### Leica Digicat 600i xf

3 Digicat 600i xf

The Leica Digicat 600i xf has the same functionality as the Digicat 500i xf with the added benefit of onboard memory and Bluetooth® connectivity. The onboard memory records information of how the Digicat 600i is used; this can then be uploaded using LOGiCAT software via Bluetooth® connectivity and additional analysis can identify operator trends, training requirements and how the locator was used following a near miss or utility strike.

Article no. 50Hz: 798644 / 60Hz: 798645



### Leica Digicat 650i xf

#### 4 Digicat 650i xf

The Leica Digicat 650i xf has the same functionality as the Digicat 600i xf, with the added benefit of depth estimation, when used in conjunction with the Leica Digitex 100t xf, Digitex 300t xf signal transmitters or Sonde with a compatible 8 kHz, 33 kHz, 512 Hz or 640 Hz output..

Article no. 50Hz: 798646 / 60Hz: 798647



### Leica Digicat 750i xf

#### 5 Digicat 750i xf

The Leica Digicat 750i xf has the same functionality as the Digicat 650i xf with the added benefit of fully integrated GPS positioning. GPS technology and data logging delivers increased data on where, when and how the locator has been used. The data files can be uploaded using LOGiCAT VU software via Bluetooth® connectivity and additional analysis can identify the position of use, site conditions, operator trends, training requirements and how the locator was used following a near miss or utility strike. The Digicat 750i xf can communicate with Apple, Android and Windows devices, PC, Laptop, GIS field controllers.

Article no. 50Hz: 821252 / 60Hz: 821253



Technical Data	Digicat 500i xf	Digicat 550i xf	Digicat 600i xf	Digicat 650i xf	Digicat 750i xf		
Frequency / Mode	Power mode 50 Hz or 60 Hz, Radio mode 15 kHz to 60 kHz, Transmitter mode 8 kHz, 33 kHz, 512 Hz, 640 Hz, Auto mode = Power + radio mode						
Depth			Power to 3 m, Radio to 2 n Dependant on transmitter o				
Depth estimation		Line mode – 0.3 to 3 m Sonde mode – 0.3 to 9.9 m 10% of depth in line or Sonde mode		Line mode – 0.3 to 3 m Sonde mode – 0.3 to 9.9 m 10% of depth in line or Sonde mode	Line mode – 0.3 to 3 m Sonde mode – 0.3 to 9.9 m 10% of depth in line or Sonde mode		
Protection			Conforms to IP 54				
Bluetooth®	Not av	ailable		Enabled			
Windows compatible				Yes			
Android compatible				Yes			
Apple compatible				Ye	25		
Batteries	6 × AA alkaline (IEC LR6 supplied)						
Battery life	40 hours intermittent use (at 20°C)						
Weight			2.7 kg including batteries				
Compatibility	CSV file compatibility program						
Memory size	32 MB memory 64 MB memory						
PROTECT service offering	Manufacturer's Warranty: Lifetime No Cost period: 1 year						
Applications (trades & tasks)	Utility contractors, sit		tion contractors, test and i	•	Operators tasked with		

### Leica Digitex Signal Transmitters

Fully protected in the harshest conditions

#### 1 Digitex 100t & 300t Signal Transmitters

To be used with the Leica Digical locators to trace the route of buried utilities and provide depth estimation, when using a locator with depth estimation capabilities.

Article no. 100t: 795946 / 300t: 798651

#### Digitex 100t xf & 300t xf Signal Transmitters

To be used with the Leica Digicat xf locators to trace the route of buried utilities and provide depth estimation, when using a locator with depth estimation capabilities.

Article no. 100t xf: 798648 / 300t xf: 798649







Technical Data	Digitex 100t	Digitex 300t	Digitex 100t xf	Digitex 300t xf
Operating transmission frequencies	• 8.192 kHz • 32.768 kHz • Mixed 8/33		• 8.192 kHz • 32.768 kHz • Mixed 8/33 • 512 Hz • 640 Hz	
Output power	4 levels			
Induction (Max)	Up to 1W max			
Direct connection (when connected to a buried utility with an impedance of 300 Ohms)	Up to 1w max	Up to 3w max	Up to 1w max	Up to 3w max
Battery type	4 × D alkaline (IEC LR20), supplied			
Battery Life (Typical use at 20°C)	30 hrs intermittent use	15 hrs intermittent use	30 hrs intermittent use	15 hrs intermittent use
Weight	2.4 kg including batteries			
Dimensions	113 mm (H) × 206 mm (D) × 250 mm (W)			
IP Rating (Case lid closed)	IP 67			
IP Rating (Case lid open)	IP 65			
Warranty	1 year			

### Leica Digisystem Accessories

Accessories supplied with/optional

#### 1 Digitrace 30 m

Enables non-metallic drains, ducts or pipes, up to 150 mm in diameter to be traced.

Article no. 796702

Digitrace 50 m

Article no. 796703

Digitrace 80 m

Article no. 796704

#### 2 Signal Clamp

100 mm clamp used to apply a traceable signal to conductive buried utilities, such as cables or pipes. Compatible with Leica Digitex signal transmitters with an output of 33 kHz.

Article no. 731056

#### 3 Multi Clamp

80 mm clamp used in conjunction with the Leica Digitex to apply a traceable signal to conductive buried utilities such as cables or pipes. The Multi Clamp is compatible with Leica Digitex signal transmitters with an output of 512 Hz to 33 kHz..

Article no. 813369

#### 4 Property Connection Cable Set

Cable set to apply a signal from Digitex onto property power cables. Compatible with Leica Digitex signal transmitters with an output of 33 kHz.

Article no. 731666 - UK version

731667 - North American version

**731668** – European version

**731669** – Swiss version

731670 - Australian version

#### 5 Digimouse Standard Sonde (8 kHz & 33 kHz)

Compact dual frequency sonde used to trace drains, sewers and other non-conductive utilities.

Article no. 731053

#### 6 MAXiSONDE (8 kHz & 33 kHz)

A 55 mm diameter dual frequency sonde used to trace deep lying drains, sewers and other non-conductive utilities. MAXISONDE can be attached to a range of equipment including drain rods, boring tools and inspection cameras. Powered by 3 x AA alkaline batteries, with a depth range of 12 metres.

Article no. 813368

#### 7 Carry Bag

Carries the Digisystem components (i.e. Digicat locator, Digitex signal transmitter and accessories).

Article no. 740307

#### 8 i-Series Locator Rechargeable Battery Kit

Smart Charger with UK, EU, USA adaptors, i-series Locator NiMH battery pack and charging cradle.

Article no. 798281

#### 9 t-Series Transmitter Rechargeable Battery Kit

Charger, t-series NiMH battery pack and charging cradle.



### Leica ULTRA

#### Precision locating for utility tracing

The Leica ULTRA provides our most advanced precision utility tracing system. Intelligent signal processing has been integrated with unique flexible operating modes. Selectable antenna and customised frequencies optimises your instru-ment for site specific applications.

#### 1 Leica ULTRA Locator

The Leica ULTRA is a precision utility tracing instrument configurable for exten-sive range of applications and allows for 100 customised frequencies and shows direction to the utility through left/right guidance arrows and an on-screen compass.

Article no. 818699



The Leica ULTRA Advanced features Offset Measuring for locating target lines not directly accessible from above, a transmitter to receiver link and AIM tech-nology which analyses the surrounding area for noise, recommends the best frequencies and synchronises the transmitter output for accurate utility tracing.

**Article no. 818698** 

3 Leica ULTRA Signal Transmitter – 5 WATT

A 5 WATT transmitter designed for the standard Leica ULTRA locator **Article no. 818702** 

4 Leica ULTRA Signal Transmitter - 12 WATT

An enhanced 12 WATT transmitter designed for the standard Leica ULTRA loca-tor that extends the tracing distance and improves locator accuracy in complex site conditions.

Article no. 818701

5 Leica ULTRA Signal Transmitter – Advanced

An advanced transmitter featuring a 12 WATT power output, communication link to enable synchronisation by the Leica ULTRA Advanced locator, external 12V power connection and dual output.

\_\_\_\_\_\_

Article no. 818700

A ULTE



2



3



5



	Standard	Advanced		
Frequency range	50 Hz - 200 kHz			
Depth	max 6 m (20 ft)			
Depth accuracy	In line - ±5% to 3 m (±5% to 10 ft) Sonde - ±5% to 3 m (±5% to 10 ft) Passive - ±5% to 3 m (±5% to 10 ft)			
Enabled frequencies	512 Hz, 3.14 kHz, 8.192 kHz, 32.768 kHz, 83.1 kHz, 200 kHz			
Custom frequencies	Up to 100 custom frequencies from 256 Hz - 83 kHz			
Line direction compass with proportional L/R arrow guid-ance	Yes	Yes		
Offset depth		Yes		
AIM		Yes		
Receiver / transmitter communications		Yes		
Bluetooth® connectivity		Yes		
PROTECT service offering	Manufacturer's Warranty: 1 Year			

#### **Leica ULTRA Transmitters**

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

### Leica ULTRA Accessories

#### 1 A Frame

Cable fault finder buried direct In the ground and used to detect cable sheath faults.

**Article no. 818708** 

#### 2 Multi Clamp

Used to apply a traceable signal to a live cable. For use with ULTRA system signal transmitter.

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

(512Hz - 33kHz)



For locating buried marker balls.







### Leica UTILIFINDER+

#### Reduce risk of utility strikes

The Leica UTILIFINDER+ is a simple complete package for builders, paving, fencing and electrical contractors, working on outside domestic properties.

- Unique easy-to-use buried utility locator
- Large clear display with audible confirmation
- Auto mode combines multiple modes to help find more buried utilities
- Provides depth estimation to 3 metres
- UTILIGEN signal transmitter to improve detection of utilities
- UTILIDRAIN allows tracing of waste water pipes

#### 1 Leica UTILIFINDER+

The UTILIFINDER+ provides a simple-to-use intuitive location system, featuring a proximity alarm to warn of shallow utilities.

Kit: Leica UTILIFINDER+, Leica UTILIGEN, Marking Chalk, User Manual, Carry Bag

Article no 813272 – Euro kit Article no 813272 – UK kit

#### 2 Leica UTILIGEN

Plug the UTILIGEN into a household socket and apply a signal onto the power cables. Use the UTILIFINDER+ to detect this signal and obtain a depth estimation with a simple press of a button.

Article no 813269 - European Plug Article no 813268 - UK Plug

#### 3 Leica UTILIDRAIN

Insert the UTILIDRAIN into drains or other nonconductive pipes to trace their route or position of blockage. Obtain depth estimation with a simple press of a button.

Article no 828308







Technical Data	Leica UTILIFINDER+	Leica UTILIGEN	Leica UTILIDRAIN
Mode / Frequency	Auto 8Khz 33kHz	33 kHz	8 kHz
Proximity alarm	Service less than 30cm deep		
Depth reading	Reading 0.3 to 3m		
Environmental protection	IP54, shower proof	Indoor use only	IP68
Power supply	Batteries 6 x AA alkaline (IEC LR6 supplied)	UK 13AMP plug mains 230Vrms	Batteries 1 x AA alkaline (IEC LR6 supplied)
Battery life	40 hours intermittent use (at 20°c)		
Plug Socket Type		EU, UK	
Weight	2.7kg including batteries	255 g	820 g including batteries
PROTECT service offering	Manufacturer's Warranty: 1 Year	Manufacturer's Warranty: 1 Year	Manufacturer's Warranty: 1 Year

### Leica LOGiCAT VU

Leica's LOGICAT VU is a Management and Monitoring System for analysing operational activity and workflow quality from Digicat cable locators.

Incorporating a suite of software tools, data can be transferred from the field directly to the office using the Logicat VU Mobile App. Plant, fleet and site managers can build a database records of one or more instruments.

# LOGICAT VU

#### Compliance to best practice

Monitor and demonstrate compliance to best practice through LOGiCAT VU. Demonstrate internal compliance to Quality Managers or clients that every care was taken to minimise risks during excavation.

- Helps reduce utility strikes to a near zero level
- Demonstrate compliance to best practice
- Provides a management tool to monitor operator performance and effectiveness
- Manage your fleet from one central system
- Transfer multiple instrument data directly from the field
- Develop comprehensive reports
- Display field data overlaid on digital map and images





#### Leica Geosystems - when it has to be right.

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

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



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in accordance with IEC 60825-1\*

\* According to product specific technical details

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**Leica Sprinter** Quick, easy and efficient digital levelling



**Leica Builder** Not just for foremen



Leica Rugby 810, 820, 830 & 840 The toughest construction lasers on site



**Leica DISTO™** The original laser distance meter











