

# Leica Geosystems Construction Catalogue Tools for any site





# Construction Lasers

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

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

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



**26-29** Leica Rugby  
CLA-ctive / CLH  
Upgradable  
Lasers



**36-37** Machine Receivers



# Leica Rugby CLA-ctive / CLH

The first upgradable lasers

## Rugby CLA-ctive

Basic Instrument including battery, charger and carrying case

Article	Description
6016027	Rugby CLA-ctive Basic



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

Article	Description
6016028	Rugby CLA-ctive & CLX250, manual grade
6016029	Rugby CLA-ctive & CLX500, manual grade, lay down
6016031	Rugby CLA-ctive & CLX600, auto single grade, lay down
6016032	Rugby CLA-ctive & CLX700, auto dual grade, lay down



## Rugby CLH

Basic Instrument including battery, charger and carry case

Article	Description
6012274	Rugby CLH Basic



Rugby CLH packages including battery, charger and carrying case

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

Combo required for all packages





# 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** 90°RE Clamp (all Rod Eyes and Combo)  
Article no. 790433
- 7** Rugby Scope with adapter plate for Rugby CLA / CLI  
Article no. 864859
- 8** Rugby Carrying case Flexible Name Tag  
Article no. 868138
- 9** Rugby Carrying case Standard Name Tag (without label)  
Article no. 864857
- 10** RC400 Remote Control  
Operates with Rugby 640 / 640G.  
Article no. 790352
- 11** A240 Manual Slope Adapter  
Used with Rugby 610.  
Article no. 790434
- 12** A210 Ceiling Grid Target  
Used with Rugby 640.  
Article no. 732791
- 13** A210G Green Ceiling Grid Target  
Used with Rugby 640G.  
Article no. 849525



# Leica Rugby Receivers

For all Rugby lasers

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



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



# Leica 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



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

# LMR 360

## 360° machine mounted receiver

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

### LMR 360R with Clamps and LMD360R Remote

LMR 360 with mounting clamps, carrying case, NiMH batteries, charger and LMD 360R remote.

Article no. 6003352

### LMR 360R with Magnets and LMD360R Remote

LMR 360 with magnetic mounts, carrying case, NiMH batteries, charger and LMD 360R remote.

Article no. 6003353







# Total Stations and Layout tool

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

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

## 52-53 Robotic Total



### Stations

Leica iCON iCR70  
Leica iCON iCR80 /  
iCR80S



## 54 Construction Layout Tool Leica iCON iCT30





# Robotic Total Stations

## Leica iCON iCR70

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



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

Leica iCON 2" iCR70 Robotic Construction Total Station & iCON build Field Software & CC80 7" WIN Tablet.

**Article no. 6013419**

Leica iCON 2" iCR70 Robotic Construction Total Station & iCON site Field Software & CC80 7" WIN Tablet.

**Article no. 6013424**

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

All Leica iCON iCR70 kits contain:

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

## Leica iCON iCR80 / iCR80S

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



iCR80

iCR80S

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

#### Kit with Leica iCON iCR80 / iCON build / CC80

Leica iCON 2" iCR80 Robotic Construction Total Station & iCON build Field Software & CC80 7" WIN Tablet.

**Article no. 6013433**

#### Kit with Leica iCON iCR80 / iCON site / CC80

Leica iCON 2" iCR80 Robotic Construction Total Station & iCON site Field Software & CC80 7" WIN Tablet.

**Article no. 6013439**

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

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

All Leica iCON iCR80 / iCR80S kits contain:

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





# Construction Layout Tool

## Leica iCON iCT30

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

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

### Leica iCON iCT30 & iCON build & CC80 Tablet

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

Article no. 6015039



The Leica iCON iCT30 kits contain:

- Layout Tool
- Tribrach
- Tripod
- USB Stick
- Charger
- Batteries
- Prism
- Pole
- Pole clamp for controller
- Bi-pod
- Layout Tool carry case
- Controller with accessories
- Controller carry case
- Field Software

# Leica iCON GNSS Sensors

## Construction GNSS Smart Antennas

### Leica iCON gps 30

#### Entry-level GNSS RTK rover

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



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

**Basic iCG30 Global Kit;** includes iCG30 & iCON site entry Software & CC70 7" Tablet PC & Pole Accessories

Article No. 6015691





# Leica iCON gps 60

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

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

## iCON gps Base Station

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

**Article no. 6015449**



The iCON GNSS kits contain:

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

## iCON gps Rover Packages with iCON site (iCON build)

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

**Article no. 6015440 (6015445)**

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

**Article no. 6015441 (6015446)**

# Leica iCON gps 70 Series

Ultimate performance for your construction site

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



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



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

**iCON gps 70 GNSS SmartAntenna Value Kit;** includes iCG70 Value Package & iCON site Field Software & CC80 7" Tablet PC & Pole Accessories.

**Article no. 6013901**

**iCON gps 70 GNSS SmartAntenna Performance Kit;** includes iCG70 Performance Package & iCON site Field Software & CC80 7" Tablet PC & Pole Accessories.

**Article no. 6013902**

**iCON gps 70 T GNSS SmartAntenna Value Kit;** includes iCG70 T Value Package & iCON site Field Software & CC80 7" Tablet PC & Pole Accessories.

**Article no. 6013926**

**iCON gps 70 T GNSS SmartAntenna Performance Kit;** includes iCG70 T Performance Package & iCON site Field Software & CC80 7" Tablet PC & Pole Accessories

**Article no. 6013927**

**iCON gps 70 GNSS SmartAntenna Value Kit;** includes iCG70 Value Package & iCON build Field Software & CC80 7" Tablet PC & Pole Accessories

**Article no. 6013935**

**iCON gps 70 GNSS SmartAntenna Performance Kit;** includes iCG70 Performance Package & iCON build Field Software & CC80 7" Tablet PC & Pole Accessories

**Article no. 6013936**

**iCON gps 70 T GNSS SmartAntenna Value Kit;** includes iCG70 T Value Package & iCON build Field Software & CC80 7" Tablet PC & Pole Accessories

**Article no. 6013950**

**iCON gps 70 T GNSS SmartAntenna Performance Kit;** includes iCG70 T Performance Package & iCON build Field Software & CC80 7" Tablet PC & Pole Accessories

**Article no. 6013951**

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



# Leica iCON Controllers

Rugged, lightweight controllers for uncompromising site work

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

## Leica iCON CC70

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

### Art. No. Description

- 881163 CC70-0, Rugged 7" Tablet PC, EU/RUS
- 881164 CC70-1, Rugged 7" Tablet PC, USA/CAN
- 881165 CC70-2, Rugged 7" Tablet PC, AUS/NZ/IND
- 881166 CC70-3, Rugged 7" Tablet PC, China
- 881167 CC70-4, Rugged 7" Tablet PC, Japan
- 896148 CC70-5, Rugged 7" Tablet PC, South Korea



## Leica iCON CC80

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

### Art. No. Description

- 878811 CC80-20, Rugged 7" Tablet PC, EU/RUS
- 878812 CC80-21, Rugged 7" Tablet PC, US/CAN
- 878813 CC80-22, Rugged 7" Tablet PC, AUS/NZ/IND
- 878814 CC80-23, Rugged 7" Tablet PC, China
- 878815 CC80-24, Rugged 7" Tablet PC, JP
- 881162 CC80-25, Rugged 7" Tablet PC, South Korea



### Leica iCON CC70 / CC80

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

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





## 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.

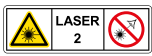
Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous – ensuring a scalable, sustainable future.

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](http://hexagon.com) and follow us @HexagonAB



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in accordance with IEC 60825-1\*

\* 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