

Leica iCON builder 60

Product information



Leica Geosystems intelligent CONstruction.

Whether you construct buildings, roads, bridges or tunnels, you benefit from intelligent CONstruction. Leica iCON is more than a new product line or software package, it enables you to enhance your performance, and increase your profitability through perfecting your construction workflow.

Understanding construction demands outstanding solutions:

- Custom-built
- Complete
- Straightforward
- High performance

When it has to be right.



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Leica iCON build Brochure



Leica Builder Series Brochure



Leica Rugby 800 Brochure

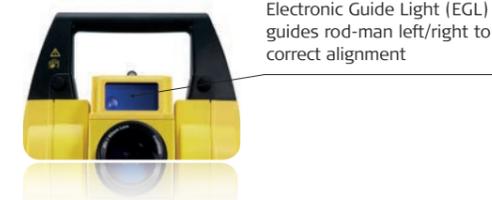


Leica iCON robot 60 Product information

With Leica iCON builder 60, construction layout was never more professional.

The intuitive user interface paired with the highest quality manual total station perfects any job.

- Industry leading layout software
- Best-in-class measurement technology
- High return on investment



Electronic Guide Light (EGL) guides rod-man left/right to correct alignment



Measurements to any surface up to 500m/1600ft

Best-in-class laser measure with PinPoint technology

Ambient light sensor (ALS) automatically controls display/button illumination

Long lasting Li-Ion batteries

3.5" coloured touch screen

iCONstruct software onboard

USB memory stick and SD card support

Speaker for sound notification

Leica iCON builder 60

One instrument for many tasks



Applications



Layout lines for footings or chalk line for formwork on foundation



Layout points on blinding layer such as pipe insert or cut-outs before pouring concrete



Check distances, area or block volume of concrete, plaster stones, etc.

Hardware



Button illumination for continued work in low light conditions



Industry leading coloured touch screen for best visibility



PinPoint R500 laser for highest measurement precision

Software



Graphical map view for quick navigation and point/line selection



Dynamic map updates with telescope & pole positions plus bulls-eye view for fast in/out & left/right guidance



Simply import your ASCII or DXF data and straight work from the map
All status information shown at a glance

Versatility



iCON builder 60 can be also used as one-person station for checks, such as tie distances, clearance or verticality



Benefit from larger screen by connecting rugged tablet via internal Bluetooth up to 50 m / 160 ft

Technical Specifications iCON builder 60

	Angle Measurement (Hz, V)	
	Accuracy ¹⁾	2" (0.6 mgon) / 5" (1.5 mgon) / 9" (2.8 mgon)
	Method	Absolute, continuous, diametrical
	Display resolution	0.1" / 0.1 mgon
	Compensation	Quadruple axis compensation
	Compensator setting accuracy	0.5"/1.5"/2"
	Distance Measurement (Prism)	
	Range ²⁾	
	Round prism (GPR1)	3.500 m (12000 ft)
	Mini Prism (CRP111, GMP101)	2.000 m (7000 ft)
	Reflective tape (60 mm x 60 mm)	250 m (800 ft)
	Accuracy ³⁾⁴⁾ / Measurement Time	
	Standard:	1.0 mm + 1.5 ppm
	Tracking:	3.0 mm + 1.5 ppm
	Distance Measurement (Any Surface) ⁷⁾	
	Range ⁵⁾	
	PinPoint R500	> 500 m (1640 ft)
	Accuracy ³⁾ / Measurement Time	2 mm + 2 ppm / typ. 3s
	Laser dot size	At 30 m: approx. 7 x 10 mm At 50 m: approx. 8 x 20 mm
	Shortest measurable distance	1.5 m
	Data storage / Communication	
	Internal memory	1 GB, > 50.000 points
	USB memory stick	1 GB
	SD card	8 GB
	Interfaces	- Serial (Baudrate up to 115'200) - USB Type A and mini B, - Bluetooth® Wireless, class 1 - Bluetooth® > 1000 m (with TCP29-5)
	Data formats	TXT/CSV (ASCII), DXF, HeXML, TRM, GEO, LIN
	Guide Light (EGL)	
	Working range (average atmospheric conditions)	5 m - 150 m
	Positioning accuracy	5 cm at 100 m
	Telescope	
	Magnification	30 x
	Resolving power	3"
	Field of View	1° 30' (1.66 gon) 2.7 m at 100 m
	Focusing range	1.7 m to infinity
	Keyboard & Display	
	Display	High resolution Color & Touch display, 65'000 colors, graphics, Full-VGA, display illumination, 10 brightness levels
	Keyboard	22 keys (4 function keys, 12 alphanumeric keys), illumination
	Operating System & Processor	
	Operating system	Windows CE 6.0
	Processor	Freescale i.MX31 533 MHz ARM Core
	Laserplummet	
	Type	Laser point
	Centering accuracy	1.5 mm at 1.5 m Instrument height
	Internal Battery	
	Type	Lithium-Ion
	Operating time ⁶⁾	approx. 6-8 hours
	Weight	
	Total station including GEB222 and tribrach	5.8 kg
	Environmental	
	Temperature range (operation)	-20° C to +50° C (-4° F to +122° F)
	Dust / Water (IEC 60529) Humidity	IP55, 95%, non condensing

Leica iCONstruct Onboard Software	
Functionality of iCON builder 60 Start Kit	iCON app "As-Built", iCON app "Layout Points", Set up with Control Line, Set up Anywhere, Height Transfer, Field Calibration, Settings
Extra functionality	iCON build, iCON build plus, iCON app "Sketch", iCON app "Volumes", iCON app "Stakeout", iCON app "Layout Lines" iCON app "Cut & Fill", iCON app "Roading", iCON app "Slopes", iCON app "Checks", 500m Reflectorless Option
Delivery Contents	iCON builder 60, Tribrach, TrueZero mini prism, Mini reflector pole set, Charger, 2x Li-Ion Batteries, Industrial grade 1GB USB stick, USB to mini-USB cable, iCONstruct Start Kit Software, Documentation, Carry Case



Legend:

- ¹⁾ Standard deviation ISO 17123-3.
- ²⁾ Overcast, no haze, visibility about 40 km; no heat shimmer.
- ³⁾ Standard deviation ISO 17123-4.
- ⁴⁾ To Round Prism GPR1.
- ⁵⁾ Under optimal conditions on Kodak Grey Card (90% reflective). Maximum range varies with atmospheric conditions, target reflectivity and surface structure.
- ⁶⁾ Single Measurement every 30 second at 25° C. Battery time may be shorter if battery is not new.
- ⁷⁾ Reflectorless measurement time may vary according to measuring objects, observation situations and environmental conditions.



Leica TrueZero prism
Mini prism with zero prism constant. No difference in measuring to surface, reflective tape or prism.



Leica iCON CC55
Lightweight, handy PDA for easy and efficient field work.



Leica iCON CC65/66
Rugged, mobile tablet PC with enhanced connectivity and functionality.



Leica iCON gps 60
Versatile SmartAntenna for multi-purpose positioning tasks.



Leica Builder
Intuitive, powerful and scalable manual total station series for routine construction tasks on site.



iCON robot 60
High-end robotic total station with superior technology and iCON onboard.