Leica iCON iCR70 & iCR80

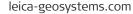
Robotic Total Stations for Construction



The Leica iCON iCR70 and iCR80 robotic total stations are the most productive one-person layout solution for construction professionals. This intuitive solution delivers fast prism search, locks and re-locks onto the prism and delivers the most reliable, simple and automated setup routine. Thanks to the industry's most reliable prism lock you never lose lock. With the iCON build layout object app integrated into the solution users benefit from a unique handling of fully rendered 3D design models in the field including the flexible creation of layout work packages for effective work progress management.

Achieve more layout points all day every day

- Work faster: Layout more points per day thanks to the most robust lock and re-lock to the prism in the market, supported by our easy-to-use and familiar Leica iCON build field software.
- Stay flexible: Create layout work packages with the highest flexibility thanks to unique handling of fully rendered 3D design models in .IFC format.
- Automated set up: Stay confident with the most reliable, simple and fully automated setup routine. The successful setup completion is visually communicated and constantly monitored during the workday.
- Machine Control: The Leica iCON iCR80S has been designed to efficiently control a wide variety of constuction machines, such as milling machines, asphalt and concrete pavers, graders and dozers.

















Leica iCON iCR70/iCR80S/iCR80







	iCR70

Leica iCON iCR80S

Leica iCON iCR80

ANGULAR MEASUREMEN	т	Leica iCON iCR70	Leica iCON iCR80S	Leica iCON iCR80
Accuracy ¹ Hz and V Absolute, continuous, diametrical		2" (0.6 mgon), 1" (0.3 mgon), 2 5" (1.5 mgon) 5" (1.5 r		
DISTANCE MEASUREMEN	IT			
Range ²	Prism (GPR1, GPH1P) ³ Non-Prism / Any surface ⁴	1.5m to 3500m R500: 1.5m to >500m	1.5m to 3500m R30: 1.5m to 30m R500 (optional)	1.5m to 3500m R30: 1.5m to 30m, R1000: 1.5m to >1000m
Accuracy / Measurement time	Single (prism) ^{2.5} Single (any surface) ^{2.4,5}	1mm + 1.5ppm / typically 2.4s 2mm + 2ppm / typically 3s		1mm + 1.5ppm / typically 2.4s 2mm + 2ppm / typically 3s ⁶
Laser dot size	At 50m	8mm x 20mm		
Measurement technology	System analyser	Coaxial, visible red laser		
AUTOMATIC AIMING				
Target aiming type		ATR	ATF	Rplus
Target aiming range ² / target locking range ²	Circular prism (GPR1, GPH1P) 360° prism (GRZ4, MPR122)			/ 1000m / 1000m
Accuracy / Measurement time	ATR angle accuracy Hz, V Automated aiming angle accuracy Hz, V	2" (0.6 mgon), 5" (1.5 mgon) / typically 3-4 sec	1" (0.3 mgon), 2" (0.6 mgon), 5" (1.5 mgon) / typically 3-4 sec	
PRISM FAST SEARCH				
Prism search type		SpeedSearch	PowerSearch	
Range / Search time 360° prism (GRZ4, MPR122)		300m / typically 7s	300m / typically 5s	
GUIDE LIGHT (EGL)			. <u>i</u>	
Working range / Accuracy		5-1!	50m / typically 5cm @ 1	00m
GENERAL			•	
Field software	Leica iCON field software			iCON Field Software running on the instrument
Machine Control enabled	thine Control enabled With optional Machine Control App		Υ	'es
Display & keyboard		4 button keyboard with status LEDs		5" (inch), WVGA, colour, touch, face I standard /face II optional, 22 keys, illumination
Processor	TI OMAP4430 1GHz Dual-core ARM® Cortex™ A9 MPCore™	Operating system – Windows EC7		s EC7
Power management	Exchangeable Lithium-Ion battery	Operating time 8–10h		Operating time 6–8h
Data storage	Internal memory Memory card	No 1 GB (for upload functions only)		Yes 2 GB 1 GB
Interfaces	RS232, USB, Bluetooth®, WLAN	RS232, Bluetooth®		RS232, USB, Bluetooth®,WLAN
Weight	Total station including battery	5.0kg		5.3kg
Environmental	Working temperature range	–20°C to +50°C		

specifications

- Legend:
 1. Standard deviation ISO 17123-3
 2. Overcast, no haze, visibility about 40 km, no heat shimmer
 3. 1.5m to 2000m for 360° prisms (GRZ4, GRZ122)
 4. Object in shade, sky overcast, Kodak Gray Card (90% reflective)
 5. standard deviation ISO 17123-4
- 5. Standard deviation ISO 17123-46. Distance > 500m: Accuracy 4mm + 2ppm, Measurement time typically 6s



Laser radiation, avoid direct eye exposure.

Class 3R laser product in accordance with IEC 60825-1:2014.

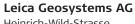
IP55 / 95%, non-condensing

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Dust / Water (IEC 60529) / Humidity





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



