



OPTIMISE YOUR LAYOUT PROCESS

- ▶ Fast, precise layout.
- ▶ UNIQUE accessory package for increased efficiency (vTargets, vSphere, vPole).
- ▶ Easily move from the office to the field using the most popular iCloud construction software.



LEICA iCON iCS20

Motorised Construction Sensor

The Leica iCON iCS20 is perfect for projecting installation points for mechanical, electrical, and plumbing systems.

Its laserpointer automatically points to the layout points on ceiling, floor or wall.

- ▶ One-person operation reduces labour costs and increases productivity.
- ▶ Simplified laser layout process.
- ▶ Ready to use in seconds thanks to its “auto-setup” feature.



LEICA iCON iCS50

Robotic Construction Sensor

The Leica iCON iCS50 provides exceptional flexibility and efficiency.

The Leica vPole allows you to layout points faster and even mark hidden points.



- ▶ Simplified layout process due to visual measurement technology.
- ▶ Leica vPole with visual-based target tracking, automatic tilt compensation and auto-height detection.
- ▶ Flexible use of laser technology and Leica vPole.

TECHNICAL DATA

3D POINT ACCURACY

Combination of angle and distance measurement	Laser	1.0 mm @ 10 m (0.04 in @ 33 ft) 2.5 mm @ 50 m (0.10 in @ 164 ft) 10.5 mm @ 250 m (0.41 in @ 820 ft)*	1.0 mm @ 10 m (0.04 in @ 33 ft) 2.0 mm @ 50 m (0.08 in @ 164 ft) 8.0 mm @ 250 m (0.31 in @ 820 ft)*
	vPen	1.5 mm @ 10 m (0.06 in @ 33 ft)**	1.0 mm @ 10 m (0.04 in @ 33 ft)
	vSphere	3.0 mm @ 50 m (0.12 in @ 164 ft)**	2.5 mm @ 50 m (0.10 in @ 164 ft)
	vPole tip	3.0 mm @ 50 m (0.12 in @ 164 ft)****	3.0 mm @ 50 m (0.12 in @ 164 ft)****

ANGULAR MEASUREMENT

Accuracy Hz and V	Standard deviation ISO 17123-3	5" (1.54 mgon)	3" (0.93 mgon)
Working Range	horizontal (Hz): 360°, vertical (V): 290°		

DISTANCE MEASUREMENT

Range	Reflectorless (Kodak White, 90% reflective)	0.3 to 50 / 250 m (0.98 - 164 / 820 ft)*	
	Reflectorless (Kodak Grey, 18% reflective)	0.3 to 50 / 120 m (0.98 - 164 / 394 ft)*	
	Standard prism (GPR1)	3.0 to 50 / 250 m (9.84 - 164 / 820 ft)*	
	Reflective tape (GZM31)	1.0 to 50 / 150 m (3.28 - 164 / 492 ft)*	
	vTarget (CVT3, CVT6)	1.2 to 40 m (3.94 - 131 ft)***	
	vPen	0.7 to 10 m (2.30 - 33 ft)**	
Accuracy Standard deviation ISO 17123-4	vSphere	1.5 to 50 m (4.92 - 164 ft)**	
	Non-Prism / Any surface	1.0 mm @ 10 m (0.04 in @ 33 ft)	<1.0 mm @ 10 m (<0.04 in @ 33 ft)
		1.5 mm @ 50 m (0.06 in @ 164 ft) / 6.0 mm @ 250 m (0.24 in @ 820 ft)*	
	Standard prism (GPR1)	1.5 mm @ 50 m (0.06 in @ 164 ft) / 3.5 mm @ 250 m (0.14 in @ 820 ft)*	
Laser dot size	Reflective tape (GZM31)	1.5 mm @ 50 m (0.06 in @ 164 ft) / 2.5 mm @ 150 m (0.08 in @ 492 ft)*	
	Coaxial, visible red laser (II class)	17.2 x 27.3 mm @ 50 m (0.68 in x 1.41 in @ 164 ft)	

AUTOMATIC AIMING

Auto aiming range	Standard prism (GPR1)	3.0 to 250 m (9.84 to 820 ft)*
	vTarget	1.2 to 40 m (3.94 to 131 ft)***

CAMERA

Field of view / Resolution	Overview camera (diagonal)	27.6° (4.91 m @ 10 m / 16 ft @ 33 ft) / 12.33 MP
	On-Axis camera (diagonal)	7.5° (1.31 m @ 10 m / 4.29 ft @ 33 ft) / 12.33 MP
	Fish-eye camera (circular)	~200° (circular) / 13.31 MP

Zoom

	16x
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GENERAL

Instrument category	iCON Construction Sensor	iCON Robotic Construction Sensor
Motorization	Motorized (robotic upgrade possible)	Robotic
Direct drives	180°/s	
Tilt compensation range	±3°	
Interfaces	USB-C (2.0), WLAN	
Weight	3.37 kg	
Environmental Specifications	Dust / Water / Humidity Operating temperature Charging temperature Storage temperature	IP54 -20°C to +50°C 0°C to +60°C -25°C to +70°C

POWER MANAGEMENT

Battery	Rechargeable Li-Ion
Operating time	> 8 h
Charging time	70% in 1h, 100% in 2h

* iCS 250 m option required. ** iCS20 requires iCS Robotic option. *** With rough aiming with the camera. Fully autonomous detection from 2 m / 6.56 ft to 25 m / 82 ft.

**** Including tilt compensation with vSphere at H3.



Simple setup

The small but powerful layout sensor and accessories can be carried and operated by one person.

Automated processes ensure that everything is ready for use quickly and reliably.



Simple software

Leica iCON trades supports layout and marking tasks. It is ideal for both simple layout tasks and more complex projects.

The handling is easy to learn, both the device and software can be used immediately.



Simple to use

The visual measurement technology always displays the current state of the job site, ensuring no detail or change is overlooked.

Automated workflows also reduce measurement complexity to a minimum.