Interior Finishing
Yes, it's that simple

- when it has to be **right**

Leica
Geosystems

Leica iCON trades

Makes Your Daily Measuring Tasks Simple

simple setup

The small but powerful measuring device including accessories can be carried and operated by one person. Automated processes ensure that everything is ready for use quickly and reliably.

The specially developed 'quick mount release' allows the device to be snapped to the tripod without needing to screw it on. Automated processes such as 'auto levelling' and 'auto set-up' ensure that the device is correctly set up and quickly ready for use, ensuring a high level of efficiency.

- One-person operation increases productivity
- Compact and lightweight design that is easy to carry
- Fast set-up with 'quick mount' and 'auto levelling'
- Quickly ready for use due to the 'auto-setup' process
- Easy repositioning with 'auto-relocation' and Leica vTarget

simple software

Leica iCON trades is a state-of-the-art solution for fast and accurate measurements, from simple to complex rooms and shapes. The handling is easy to learn and the device and software can be used immediately.

The software follows the industry-specific workflows and ensures a seamless data flow from the measurement and CAD editing on site, through the creation of the model in the CAD software and the production in the CNC machine, to the assembly on site.

- Easy-to-use, segment specific and workflow-oriented software
- Standard mobile app approach
- Finalisation of drawings on site with powerful CAD tools
- Export to 2D/3D DXF files for further processing in CAD applications
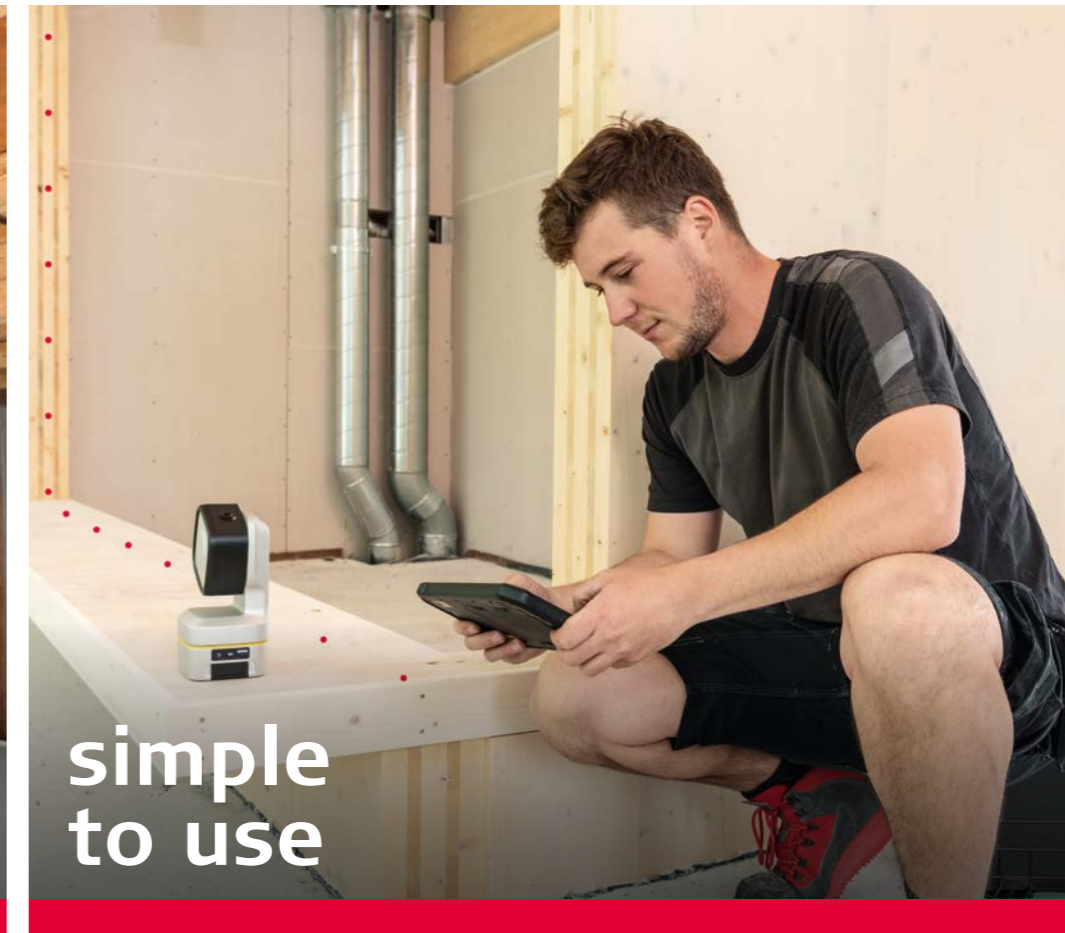
simple to use

The visual measurement technology always displays the current situation and prevents anything from being forgotten. Automated workflows also reduce measurement complexity to a minimum.

The unique solution combines multiple measurement technologies to ensure precise and reliable data collection via laser, wireless Leica vPen, line or area scans. In addition it does not matter which direction you are moving the Leica vPen. Its unique pattern is always reliably detected by the Leica iCON iCS50.

- Fast and efficient data capturing in 2D and 3D
- Automated measurement processes line / area scans
- Visual-based search and robust target lock on Leica vPen
- Flexible use of laser technology and wireless Leica vPen
- Projection of fixing points reduces assembly time on site
- Clear documentation with automatically generated photos
- Instrument movement alert to ensure consistent setup accuracy

Capturing Absolute Dimensions
Nothing Can Be Forgotten

Optimise Your Production
Use Digital Workflows

Leica iCON iCS20
Motorised Construction Sensor

The Leica iCON iCS20 motorised construction sensor is perfect for capturing 2D and 3D measurement data for interior finishing as well as projecting installation points. Easily aim at measurement points using the high-resolution camera or the laser-point.
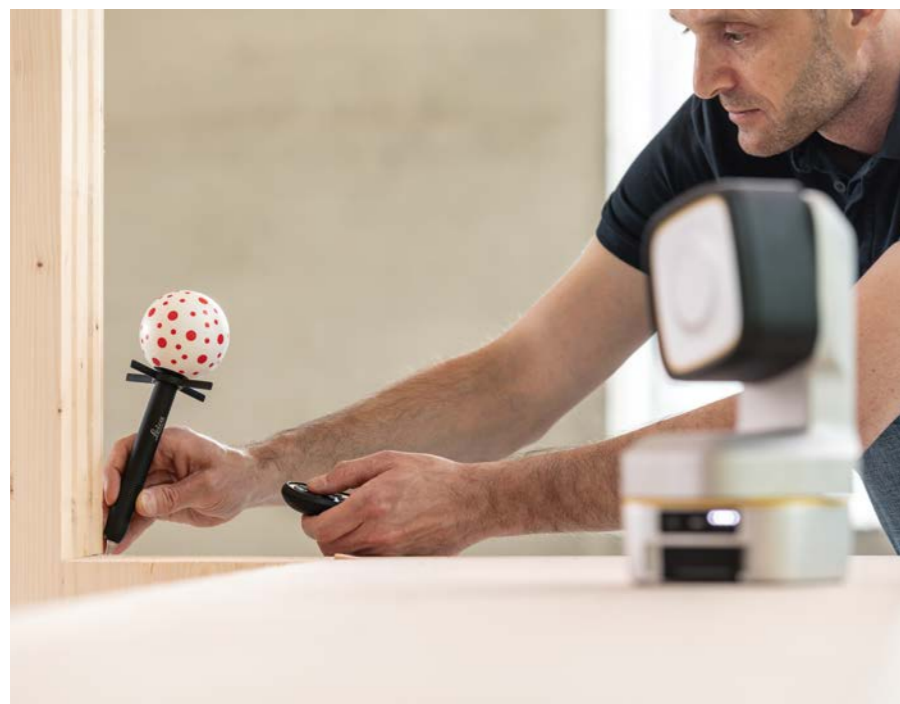
- High-resolution cameras for precise aiming
- One-person operation increases productivity
- Simplified 2D and 3D measurements
- Quickly ready for use due to the automated set-up process

Leica iCON iCS50
Robotic Construction Sensor

The Leica iCON iCS50 robotic construction sensor provides exceptional flexibility and efficiency. For measurements on reflective or glossy surfaces, the unique, wireless Leica vPen serves as an excellent addition to capture accurate measurement data.

- Leica vPen, the unique wireless measuring pen
- Simplified measurement process
- Flexible use of laser technology and Leica vPen

Accurate Digital Measurements
Leica iCON trades allows you to capture high-precision measurement data, even from hard-to-access locations. The software immediately visualises the measurement results as a 2D plan or 3D model on your tablet. This way you can immediately see what you have measured and be sure that you have not forgotten any measuring point.

Automatic Measurement Workflows
Automatic measurement workflows, such as line and area scans, ensure even higher accuracy and efficiency. Simply define the measuring area by a start and end point, set the measur- ing intervals and start the scan. This function is especially useful for capturing complex contours, such as arched doors, spiral staircases or rooms with uneven walls.
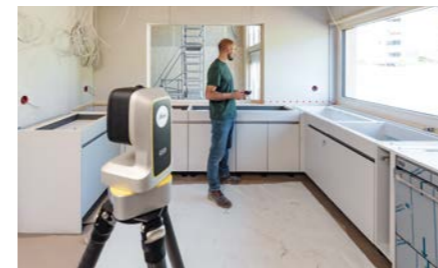
Easy Relocation
The automated relocation process uses visual targets to quickly and easily relocate the Leica iCON iCS20/ iCS50. Once the device is reposi- tioned, it automatically finds and measures the vTargets, identifies its new position and you can continue measuring right away. This saves you time, avoids errors and allows you to quickly resume your measurement tasks.

Easy Data Export and Design in the Office
At the touch of a button, you can export the measurement results in either DXF, PDF or CSV file format, before using this data to create your design in your preferred CAD software. The CAD design can then be used to manufacture the individual components with precision fit, either manually or with the CNC machine, which can be programmed directly with the CAD data.

Fast Installation
Due to the precise production, no on-site adjustments are needed, saving materials and time, and keeping the construction site clean. Furthermore, Leica iCON trades allows you to project installation points from the CAD drawing directly onto the site, further enhancing the efficiency and precision of your work.

Scope of Delivery

Leica iCON iCS20

Laser Interior Finishing Package

- Leica iCON iCS20
- Leica iCON trades for Interior Finishing software
- Charger for indoor use
- Leica CSX8 tablet incl. pouch

- GZM3 target plate
- vTarget plates incl. stands
- vTarget stickers
- Carry case
- Leica CTP108 Carbon tripod

Leica iCON iCS50

vPen Interior Finishing Package

- Leica iCON iCS50
- Leica iCON trades for Interior Finishing software
- Leica vPen
- Charger for indoor use
- Leica CSX8 tablet incl. pouch

- RC10 remote control
- GZM3 target plate
- vTarget plates incl. stands
- vTarget stickers
- Carry case
- Leica CTP108 Carbon tripod

Technical Data

		iCON iCS20	iCON iCS50 Robotic
3D POINT ACCURACY			
Combination of angle and distance measurement	Laser	1.0 mm @ 10 m (0.04 in @ 33 ft)	1.0 mm @ 10 m (0.04 in @ 33 ft)
		2.5 mm @ 50 m (0.10 in @ 164 ft)	2.0 mm @ 50 m (0.08 in @ 164 ft)
		10.5 mm @ 250 m (0.41 in @ 820 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)*	
	vTarget (CVT3, CVT6)	1.2 to 40 m (3.94 - 131 ft)***	
	vPen	0.7 to 10 m (2.30 - 33 ft)**	
	vSphere	1.5 to 50 m (4.92 - 164 ft)**	
Accuracy Standard deviation ISO 17123-4	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)*	
Laser dot size	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	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	
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), WLAN	
Weight		3.37 kg	
Environmental Specifications	Dust / Water / Humidity	IP54	
	Operating temperature	-20°C to +50°C	
	Charging temperature	0°C to +60°C	
	Storage temperature	-25°C to +70°C	
POWER MANAGEMENT			
Battery		Rechargeable Li-Ion	
Operating time		> 8 h	
Charging time		70% in 1 h, 100% in 2 h	

* 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.

LASER 2

Laser class 2 in acc. with IEC 60825-1

Leica Geosystems – when it has to be right

With more than 200 years of history, Leica Geosystems, part of Hexagon, is the trusted supplier of premium sensors, software and services. Delivering value every day to professionals in surveying, construction, infrastructure, mining, mapping and other geospatial content-dependent industries, Leica Geosystems leads the industry with innovative solutions to empower our autonomous future.

Hexagon (Nasdaq Stockholm: HEXA B) has approximately 24,000 employees in 50 countries and net sales of approximately 5.2bn EUR. Learn more at hexagon.com and follow us @HexagonAB.

Leica iCON trades for Digital Templating
Brochure

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