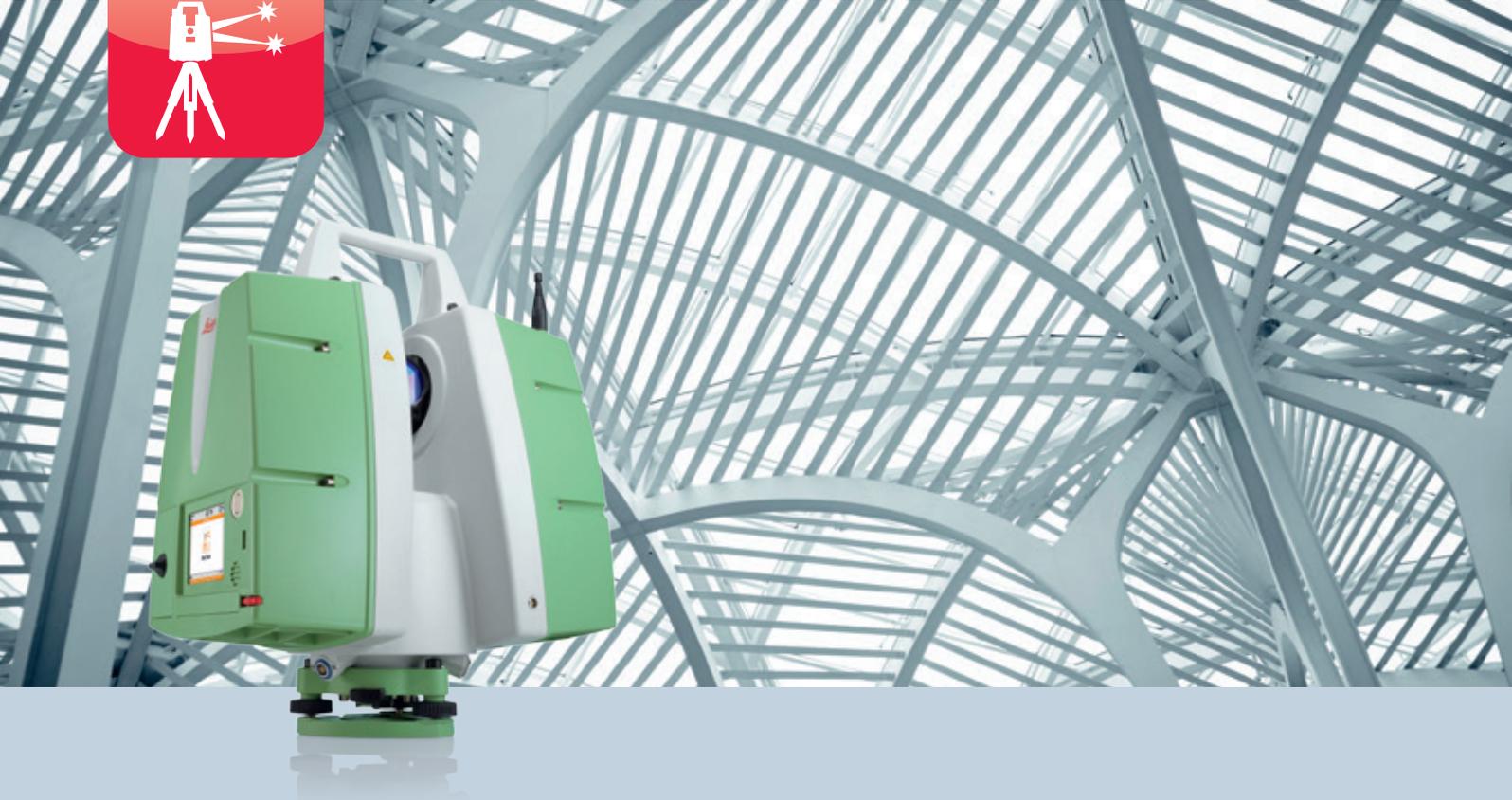


Leica ScanStation P15

Enter the world of precise laser scanning



Precise laser scanning at the touch of a button!

Data quality & speed

The new Leica ScanStation P15 achieves an extremely fast million points per second scan rate and delivers the highest quality possible in 3D data for project scans with ranges of up to 40m. In addition, it has best-in-class angular measurements and tilt compensation, making the Leica ScanStation P15 perfectly suited for quick and accurate as-built surveys of any scenes.

Works under the most challenging conditions

Robustly built, the Leica ScanStation P15 can be used even under the most challenging conditions. With an environmental rating of IP54, the Leica ScanStation P15 operates at temperatures ranging from -20°C to +50°C and also enables 3D scanning in full sunlight or complete darkness.

Easy-to-use

The Leica ScanStation P15 features an intuitive and user-friendly touch screen interface. The one-touch scan button and wizard style software guarantee an easy workflow and enable a fast data check in the field. Combined with WLAN remote control, the Leica ScanStation P15 can be operated by any handheld device.

Value for money

Its attractive price-performance ratio, worldwide support and quality service from Leica Geosystems result in a low cost of ownership and make the Leica ScanStation P15 the perfect solution for companies entering the laser scanning business.

Leica ScanStation P15

Product specifications

General																																														
Instrument type	Compact, ultra-high speed pulsed laser scanner with survey grade accuracy and integrated camera																																													
User interface	Onboard control, notebook or tablet PC, PDA																																													
Data storage	Integrated solid-state drive (SSD) or external USB flash drive																																													
Camera	Auto-adjusting, integrated high-resolution digital camera with zoom video																																													
System Performance																																														
Accuracy of single measurement	3 mm at 40 m																																													
3D Position Accuracy	≤ 1 mm																																													
Linearity error	8" horizontal; 8" vertical																																													
Angular accuracy																																														
Target acquisition*	Up to 40 m in post-processing software																																													
Dual-axis compensator	Selectable on/off, resolution 1", dynamic range +/- 5', accuracy 1.5"																																													
Laser Scanning and Imaging System																																														
Type	Ultra-high speed time-of-flight enhanced by Waveform Digitising (WFD) technology																																													
Wavelength	808 nm (invisible) / 658 nm (visible)																																													
Laser class	2 (in accordance with IEC 60825-1)																																													
Beam divergence	0.2 mrad																																													
Beam diameter at front window	≤ 2.8 mm																																													
Range	Up to 40 m; 18% reflectivity (minimum range 0.4 m)																																													
Scan rate	Up to 1'000'000 points/s																																													
Range noise**	<table border="1"> <thead> <tr> <th>Range</th> <th>Black (10%)</th> <th>Gray (28%)</th> <th>White (100%)</th> </tr> </thead> <tbody> <tr> <td>10m</td> <td>0.8 mmrms</td> <td>0.5 mmrms</td> <td>0.4 mmrms</td> </tr> <tr> <td>20m</td> <td>1.0 mmrms</td> <td>0.6 mmrms</td> <td>0.5 mmrms</td> </tr> <tr> <td>40m</td> <td>2.8 mmrms</td> <td>1.1 mmrms</td> <td>0.7 mmrms</td> </tr> </tbody> </table>	Range	Black (10%)	Gray (28%)	White (100%)	10m	0.8 mmrms	0.5 mmrms	0.4 mmrms	20m	1.0 mmrms	0.6 mmrms	0.5 mmrms	40m	2.8 mmrms	1.1 mmrms	0.7 mmrms																													
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Field-of-View	360°																																													
Horizontal	270°																																													
Vertical																																														
Aiming/Sighting	Parallax-free, integrated zoom video																																													
Scanning optics	Vertically rotating mirror on horizontally rotating base Up to 50Hz with internal battery Up to 100Hz with external power supply																																													
Data storage capacity	256 GB onboard solid-state drive (SSD) or external USB device																																													
Communications	Gigabit Ethernet or integrated Wireless LAN																																													
Imaging	5 megapixels per each 17° x 17° colour image; streaming video with zoom; auto-adjusts to ambient lighting																																													
Onboard display	Touchscreen control with stylus, full colour VGA graphic display (640x480 pixels)																																													
Level indicator	External bubble, electronic bubble in onboard software																																													
Data transfer	Ethernet, WLAN or USB 2.0 device																																													
Laser plummet	Laser class 1 (IEC 60825-1) Centering accuracy: 1.5 mm at 1.5 m Laser dot diameter: 2.5 mm at 1.5 m Selectable ON/OFF																																													

Electrical	
Power supply	24V DC, 100 – 240V AC
Power consumption	40W typical
Battery type	Internal: Li-Ion; External: Li-Ion
Power ports	Internal: 2, External: 1 (simultaneous use, hot swappable)
Duration	Internal > 7h (2 batteries), External > 8.5h (room temp.)
Environmental	
Operating temperature	-20°C to +50°C / -4°F to 122°F
Storage temperature	-40°C to +70°C / -40°F to 158°F
Lighting	Fully operational between bright sunlight and complete darkness
Humidity	Non-condensing
Dust/Humidity	IP54 (IEC 60529)
Physical	
Scanner	Dimensions (D x W x H) Weight
	238 mm x 358 mm x 395 mm / 9.4" x 14.1" x 15.6" 11.9 kg / 26.2 lbs, nominal (w/o batteries)
Battery (internal)	Dimensions (D x W x H) Weight
	40 mm x 72 mm x 77 mm / 1.6" x 2.8" x 3.0" 0.4 kg / 0.9 lbs
Battery (external)	Dimensions (D x W x H) Weight
	95 mm x 248 mm x 60 mm / 3.7" x 9.8" x 2.4" 1.9 kg / 4.2 lbs
AC Power Supply	Dimensions (D x W x H) Weight
	170 mm x 85 mm x 42.5 mm / 6.6" x 3.3" x 1.6" 0.86 kg / 1.9 lbs
Mounting	Upright or upside down
Standard Accessories Included	
Scanner transport case Tribrach (Leica Professional Series) 4x Internal batteries Battery charger / AC power cable, car adapter, daisy chain cable Data cable 1 year CCP Basic support contract	
Additional Accessories & Services	
B&W scan targets and target accessories Range of Customer Care Products (CCPs) that include Support, Hardware & Software maintenance and Extended warranty. External battery with charging station, AC power supply and power cable Professional charger for internal batteries AC power supply for scanner Tripod and tripod star Upside down mounting adapter	
Control Options	
Full colour touchscreen for onboard scan control. Remote control: Leica CS10/CS15 controller or any other remote desktop capable device, including iPad, iPhone and other Smartphones.	
Ordering Information	
Contact your local Leica Geosystems representative or an authorised Leica Geosystems dealer.	
All specifications are subject to change without notice. All accuracy specifications are one sigma unless otherwise noted. * Algorithmic fit to planar B&W targets ** Detailed explanation on request	
Scanner: Laser class 2 in accordance with IEC 60825-1 resp. EN 60825-1 Laser plummet: Laser class 1 in accordance with IEC 60825-1 resp. EN 60825-1	
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Leica ScanStation P20 Brochure



Leica ScanStation C10 Brochure



Leica Cyclone REGISTER Datasheet

Leica Geosystems AG
Heerbrugg, Switzerland

www.leica-geosystems.com/hds



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Active Customer care is a true partnership between Leica Geosystems and its customers. Customer Care Packages (CCPs) ensure optimally maintained equipment and the most up-to-date software to deliver the best results for your business. The myWorld @ Leica Geosystems customer portal provides a wealth of information 24/7.

- when it has to be **right**

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