Leica ScanStation P16

Because every detail matters



Easy-to-use

The Leica ScanStation P16 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 P16 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 P16 the perfect solution for companies entering the laser scanning business.

Reduced downtime

The extremely durable new laser scanner performs even under the toughest environmental conditions, such as extreme temperatures ranging from – 20° C to + 50° C and complies with the IP54 rating for dust and water resistance.

Complete scanning solution

Leica Geosystems offers the new Leica ScanStation portfolio as an integrated part of a complete scanning solution including hardware, software, service, training and support. 3D laser scanner data can be processed in the industry's leading 3D point cloud software suite, which consists of Leica Cyclone stand-alone software, Leica CloudWorx plug-in tools for CAD systems and the free Leica TruView.





Leica ScanStation P16 **Product specifications**

System Accuracy	
Accuracy of single measurement * Range accuracy Angular accuracy 3D position accuracy	1.2 mm + 10 ppm over full range 8" horizontal; 8" vertical 5 mm at 80 m
Target acquisition **	Up to 40m in post-processing software
Dual-axis compensator	Liquid sensor with real-time onboard compensation, selectable on/off, resolution 1", dynamic range ±5', accuracy 1.5"

accuracy 1.5	
Distance Measurement System	
Ultra-high speed time-of-flight enhanced by Waveform Digitising (WFD) technology	
1550nm (invisible) / 658nm (visible)	
1 (in accordance with IEC 60825:2014)	
< 0.23mrad (FWHM, full angle)	
≤ 3.5 mm (FWHM)	
Up to 80m; 18% reflectivity (minimum range 0.4m)	
Up to 1'000'000 points per second	
0.4mm rms at 10m 0.5mm rms at 50 m	
360° 290°	
256GB internal solid-state drive (SSD) or external USB device	
Gigabit Ethernet, integrated Wireless LAN or USB 2.0 device	
Touchscreen control with stylus, full colour VGA graphic display (640×480 pixels)	
Laser class 1 (IEC 60825:2014) Centring accuracy: 1.5 mm at 1.5 m Laser dot diameter: 2.5 mm at 1.5 m Selectable ON/OFF	

Imaging System	
Internal camera	
Resolution	4 megapixels per each 17°×17° colour image;
	700 megapixels for panoramic image
Pixel size	2.2 µm
Video	Streaming video with zoom; auto-adjusts to ambient
	lighting
White balancing	Sunny, cloudy, warm light, cold light, custom
HDR	Tonemapped / full range
External camera	Canon EOS 60D/70D/80D supported

Power	
Power supply	24 V DC, 100 - 240 V AC
Battery type	2× Internal: Li-lon; External: Li-lon (connect via external port, simultaneous use, hot swappable)
Duration	Internal > 5.5 h (2 batteries) External > 7.5 h (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
Humidity	95%, non-condensing
Dust/Water	Solid particle/liquid ingress protection IP54 (IEC 60529)

Physical	ysical	
Scanner Dimensions (D×W×H) Weight	238mm × 358mm × 395mm / 9.4" × 14.1" × 15.6" 12.25 kg / 27.0lbs, nominal (w/o batteries)	
Battery (internal) Dimensions (D×W×H) Weight	40 mm × 72 mm × 77 mm / 1.6" × 2.8" × 3.0" 0.4kg / 0.9lbs	
Mounting	Upright or inverted	

Control Options

Full colour touchscreen for onboard scan control.
Remote control: Leica CS10/CS15/CS20/CS35 controller or any other remote desktop capable device, including iPad, iPhone and other SmartPhones; external simulator.

Functionality	
One button scan control	Scanner operation with one button concept
Scan area definition	Scan area selection from video or scan; batch job
	scanning

Ordering Information

Contact your local Leica Geosystems representative or an authorised Leica Geosystems

All specifications are subject to change without notice.
All accuracy specifications are one sigma unless otherwise noted.
At 78% albedo
Algorithmic fit to planar HDS 4.5" B&W targets

Scanner: Laser class 1 in accordance with IEC 60825:2014 Laser plummet: Laser class 1 in accordance with IEC 60825:2014

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Leica ScanStation P30/40 Leica Cyclone REGISTER

Leica Cyclone MODEL



Your Trusted Active Customer Care

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.

Leica Geosystems AG

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