

Leica Geosystems terrestrial laser scanners

Which laser scanner is right for you?



ScanStation P50



ScanStation P40



ScanStation P30



RTC360



RTC360 LT



BLK360



BLK360 SE

Distance measurement system							
Maximum range	> 1 km	270 m	120 m	130 m	130 m	45 m	45 m
Maximum scan rate	1 mio pts/sec	1 mio pts/sec	1 mio pts/sec	2 mio pts/sec	1 mio pts/sec	680,000 pts/sec	340,000 pts/sec
Selectable sensitivity levels	✓	✓	✗	✗	✗	✗	✗
Resolution settings	User definable	User definable	7 (0.8 mm to 50 mm @ 10 m)	3 (3/6/12 mm @ 10 m)	3 (3/6/12 mm @ 10 m)	4 (6/12/25/50 mm @ 10 m)	3 (6/12/25 mm @ 10 m)
Laser class	1	1	1	1	1	1	1
Laser wavelength	1550 nm (invisible)	1550 nm (invisible)	1550 nm (invisible)	1550 nm (invisible)	1550 nm (invisible)	830 nm (invisible)	830 nm (invisible)
Tilt sensor, Tilt accuracy	Dual axis compensator, 1.5 arcsec	Dual axis compensator, 1.5 arcsec	Dual axis compensator, 1.5 arcsec	IMU, 18 arcsec	IMU, 18 arcsec	IMU	IMU
3D accuracy	4.4 mm @ 50 m (> 1 km mode) 6.8 mm @ 100 m (> 1 km mode)	3.2 mm @ 50 m 5.9 mm @ 100 m	3.2 mm @ 50 m 5.9 mm @ 100 m	6.4 mm @ 50 m 12.5 mm @ 100 m	6.4 mm @ 50 m 12.5 mm @ 100 m	4 mm @ 10 m 8 mm @ 20 m	4 mm @ 10 m 8 mm @ 20 m
Imaging system							
Internal camera	✓	✓	✓	✓	✓	✓	✓
HDR	✓	✓	✓	✓	✓	✓	✓
External camera	Optional	Optional	Optional	✗	✗	✗	✗
Environmental							
Operating temperature	-20°C to +50°C	-20°C to +50°C	-20°C to +50°C	-5°C to +40°C	-5°C to +40°C	0°C to +40°C	0°C to +40°C
Solid particle/Liquid ingress protection	IP54	IP54	IP54	IP54	IP54	IP54	IP54
Survey/setup functionality							
Quick orientation	✓	✓	✓	✗	✗	✗	✗
Set azimuth	✓	✓	✓	✗	✗	✗	✗
Known backsight	✓	✓	✓	✗	✗	✗	✗
Resection	✓	✓	✓	✗	✗	✗	✗
Auto resection	✓	✓	✓	✗	✗	✗	✗
Traverse	✓	✓	✓	✗	✗	✗	✗
Registration							
Onsite pre-registration (Cyclone FIELD 360)	✓	✓	✓	✓	✓	✓	✓
Cloud to cloud post-processing	✓	✓	✓	✓	✓	✓	✓
Target based post-processing	✓	✓	✓	✓	✓	✓	✓
General functionality							
Onboard target acquisition	✓	✓	✓	✗	✗	✗	✗
Check & Adjust	✓	✓	✓	✓	✓	✗	✗
One button scan control	✓	✓	✓	✓	✓	✓	✓
Scan area definition from video or scan	✓	✓	✓	✗	✗	✗	✗
Batch job scanning	✓	✓	✓	✗	✗	✗	✗
Double scan for moving objects removal	✓	✓	✓	✓	✓	✗	✗
Remote control	✓	✓	✓	✓	✓	✓	✓
Data Security	✗	✗	✗	✓	✓	✗	✗
Upgrade options							
Upgrade options	✗	Upgrade to P50	Upgrade to P40/P50	✗	✗	✗	✗
Additional sensors							
IMU	✗	✗	✗	✓	✓	✓	✓
GNSS	Optional/External	Optional/External	Optional/External	✓	✓	✗	✗
Altimeter	✗	✗	✗	✓	✓	✗	✗
Compass	✗	✗	✗	✓	✓	✗	✗
Visual Inertial System (VIS)	✗	✗	✗	✓	✗	✓	✗
Portability							
Weight	12.3 kg	12.3 kg	12.3 kg	5.3 kg	5.3 kg	0.85 kg	0.85 kg
Size	238 x 358 x 395 mm	238 x 358 x 395 mm	238 x 358 x 395 mm	120 x 240 x 230 mm	120 x 240 x 230 mm	80 x 80 x 155 mm	80 x 80 x 155 mm

✓ = Available, ✗ = Not available