

Leica Geosystems terrestrial laser scanners

Which laser scanner is right for you?



BLK360



RTC300



RTC500



RTC700

Distance measurement system				
Maximum range	45 m	85 m	130 m	270 m
Maximum scan rate	680,000 pts/sec	1 mio pts/sec	2 mio pts/sec	2 mio pts/sec
Resolution settings	4 (6/12/25/50 mm @ 10 m)	4 (3/6/12/25 mm @ 10 m)	4 (3/6/12/25 mm @ 10 m)	6 (0.8/1.6/3/6/12/25 mm @ 10 m)
Laser class	1	1	1	1
Laser wavelength	830 nm (invisible)	1550 nm (invisible)	1550 nm (invisible)	1550 nm (invisible)
Tilt sensor, Tilt accuracy	IMU	Tilt compensator, 3 arcsec	Tilt compensator, 3 arcsec	Tilt compensator, 3 arcsec
3D accuracy	4 mm @ 10 m 8 mm @ 20 m	1.5 mm @ 10 m 3.8 mm @ 50 m	1.5 mm @ 10 m 3.8 mm @ 50 m	1.5 mm @ 10 m 3.8 mm @ 50 m
Imaging system				
Internal camera	13 MP 4-camera system 104 MP per setup	12 MP 6-camera system 432 MP per setup	12 MP 6-camera system 432 MP per setup	12 MP 6-camera system 432 MP per setup
HDR	5 brackets	5 brackets	5 brackets	5 brackets
Image acquisition time (HDR)	20 sec	30 sec	30 sec	30 sec
Environmental				
Operating temperature	0°C to +40°C	-20° to +50°	-20° to +50°	-20° to +50°
Solid particle/Liquid ingress protection	IP54	IP55	IP55	IP55
Survey/setup functionality				
Known backsight	✗	✗	✗	✓
Setup over a known point	✗	✗	✗	✓
Resection	✗	✗	✗	✓
Traverse	✗	✗	✗	✓
Target measurements up to 75 m	✗	✗	✗	✓
Targets from a full dome scan	✓	✓	✓	✓
Onsite registration				
Onsite automatic registration	✓	✓	✓	✓
Infield cloud to cloud registration	✓	✓	✓	✓
Infield target-based registration	✓	✓	✓	✓
Cloud collaboration / Livelink				
Real-time interconnectivity between field and office	✗	✓	✓	✓
Real-time interconnectivity in field between users	✗	✓	✓	✓
Remote project and work coordination between multiple scanners	✗	✓	✓	✓
General functionality				
Automatic self-calibration	✗	✓	✓	✓
One button scan control	✓	✓	✓	✓
Area Scan	✗	✗	✗	✓
Remote control	✓	✓	✓	✓
Upgradeability				
Upgrade options	✗	✓	✓	✗
Additional sensors				
IMU	✓	✓	✓	✓
GNSS	✗	✓	✓	✓
Visual Inertial System (VIS)	✓	✓	✓	✓
Portability				
Weight	0.85 kg	5.6 kg	5.6 kg	5.6 kg
Size	80 x 80 x 155 mm	121 mm x 240 mm x 254 mm	121 mm x 240 mm x 254 mm	121 mm x 240 mm x 254 mm

✓ = Available, ✗ = Not available