

Leica Geosystems Total Station Comparison Chart



	Leica FlexLine TS03	Leica FlexLine TS07	Leica FlexLine TS10	Leica TS13	Leica TS20	Leica Nova TM60	Leica Nova TS60	Leica Nova MS60
	Manual Total Stations			Robotic Total Stations				MultiStation
Angular accuracy	2", 3", 5"	1", 2", 3", 5", 7"	1", 2", 3", 5"	1", 2", 3", 5"	1", 2", 3", 5"	0.5", 1"	0.5"	1"
Prism range (GPR1, GPH1P)	0.9 m to 3'500 m > 10'000 m (Long Range mode)	0.9 m to 3'500 m > 10'000 m (Long Range mode)	0.9 m to 3'500 m > 10'000 m (Long Range mode)	0.9 m to 3'500 m > 10'000 m (Long Range mode)	0.8 m to 10'000 m	0.9 m to 3'500 m > 10'000 m (Long Range mode)	0.9 m to 3'500 m > 10'000 m (Long Range mode)	1.5 m to > 10'000 m
Distance measurement accuracy on prism	1.0 mm + 1.5 ppm	1.0 mm + 1.5 ppm	1.0 mm + 1.5 ppm	1.0 mm + 1.5 ppm	1 mm + 1.0 ppm	0.6 mm + 1 ppm	0.6 mm + 1 ppm	1.0 mm + 1.5 ppm
PinPoint EDM: reflectorless range¹	R500: > 500 m	R500: > 500 m R1000: > 1'000 m	R500: > 500 m R1000: > 1'000 m	R500: > 500 m R1000: > 1'000 m	R800: > 800 m; LC2 R1600: > 1'600 m; LC3R	R1000: > 1'000 m	R1000: > 1'000 m	R2000: > 2'000 m
Distance measurement accuracy reflectorless	2 mm + 2 ppm	0 m - 500 m: 2 mm + 2 ppm > 500 m: 4 mm + 2 ppm	0 m - 500 m: 2 mm + 2 ppm > 500 m: 4 mm + 2 ppm	0 m - 500 m: 2 mm + 2 ppm > 500 m: 4 mm + 2 ppm	0 m - 500 m: 2 mm + 2 ppm > 500 m: 4 mm + 2 ppm	0 m - 500 m: 2 mm + 2 ppm > 500 m: 4 mm + 2 ppm	0 m - 500 m: 2 mm + 2 ppm > 500 m: 4 mm + 2 ppm	0 m - 500 m: 2 mm + 2 ppm > 500 m: 4 mm + 2 ppm
Display	3.5" QVGA 28 keys grayscale	3.5" QVGA 28 keys color touchscreen	5" WVGA 25 keys (standard) color touchscreen 5" WVGA 37 keys (optional) color touchscreen	Keyboard Unit 4 keys or 5" WVGA 25 keys color touchscreen	5" WVGA 37 keys multi-touch color screen	5" WVGA 37 keys color touchscreen	5" WVGA 37 keys color touchscreen	5" WVGA 37 keys color touchscreen
Key illumination	✗	✓	✓	✓ (with 5" WVGA screen)	✓	✓	✓	✓
Face II display	✗	•	•	• (with 5" WVGA screen)	•	•	✓	✓
Electronic guide light (EGL)	✗	• (R1000 only)	• (R1000 only)	✓	✓	✗	✓	✓
Interfaces (wired)	RS232 / SD / USB	RS232 / SD / USB	RS232 / SD / USB	RS232 / SD / USB	Ethernet / USB-C	RS232 / SD / USB	RS232 / SD / USB	RS232 / SD / USB
BT / WLAN	✗	✓	✓	✓	✓	✓	✓	✓
Mobile data (GSM / UMTS / LTE)	✗	•	•	✗	•	✗	✗	✗
Long range BT communication	✗	✗	✗	• (with radio handle)	✓	✓ (with radio handle)	✓ (with radio handle)	✓ (with radio handle)
AutoHeight	✗	•	✓	✓	✓	✗	✓	✓
Overview camera	✗	✗	•	✗	•	•	✓	✓
Telescope camera	✗	✗	✗	✗	✗	•	✓	✓
SmartStation (GNSS) capability	✗	✗	✗	•	✗	•	•	•
Motorization	✗	✗	✗	DC drives	Brushless DC direct drives	Piezo drives	Piezo drives	Piezo drives
Automatic target aiming	✗	✗	✗	✓	✓ (AI-powered)	✓ (Long range)	✓	✓
Prism fast search	✗	✗	✗	• (SpeedSearch)	✓ (except TS20 A)	✗	✓ (PowerSearch)	✓ (PowerSearch)
Prism lock	✗	✗	✗	•	✓	✗	✓	✓
Scanning	✗	✗	✗	✗	✗	✗	✗	✓ (up to 30'000 pts/s)
Autofocus	✗	✗	✗	✗	✓	•	✓	✓
Remote control	✗	✓	✓	✓	✓	✓	✓	✓
AP20 support	✗	✗	✗	• AP20 H • AP20 ID²	✓	• ²	•	•
Operating time	30 h (GEB361)	30 h (GEB361)	Up to 19 h (GEB361)	Up to 8 h (GEB222)	Up to 5 h (GEB461)	Up to 9 h (GEB242)	Up to 9h (GEB242)	Up to 9h (GEB242)
Weight³	4.3 kg	4.3 kg	4.4 kg	4.8 kg	5.0 kg	7.2 kg	7.3 kg	7.3 kg
Field software	FlexField	FlexField	Captivate	Captivate (with 5" WVGA screen)	Captivate	Captivate	Captivate	Captivate
Tracking & theft deterrence	• (LOC8)	• (LOC8)	• (LOC8)	• (LOC8)	• (GeoCloud Protect)	• (LOC8)	• (LOC8)	• (LOC8)

Legend: 1. Kodak gray 90% reflective 2. AP20 Tilt requires prism lock functionality, AP20 ID requires prism fast search functionality 3. Standard instrument weight without battery ✓ = Included • = Optional ✗ = Not available

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