

Leica Geosystems Total Station Comparison Chart



	Leica FlexLine TS03	Leica FlexLine TS07	Leica FlexLine TS10	Leica TS13	Leica TS16	Leica Nova TM60	Leica Nova TS60	Leica Nova MS60
	Manual Total Stations			Automated 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)	0.9 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)	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	1.0 mm + 1.5 ppm	0.6 mm + 1 ppm	0.6 mm + 1 ppm	1.0 mm + 1.5 ppm
PinPoint EDM: Reflectorless range ¹	R500: > 500 m	R500: > 500 m R1000: > 1'000 m	R500: > 500 m R1000: > 1'000 m	R500: > 500 m R1000: > 1'000 m	R500: > 500 m R1000: > 1'000 m	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 colour touchscreen	5" WVGA 25 keys (standard) colour touchscreen 5" WVGA 37 keys (optional) colour touchscreen	Keyboard Unit 4 keys or 5" WVGA 25 keys colour touchscreen	5" WVGA 37 keys colour touchscreen	5" WVGA 37 keys colour touchscreen	5" WVGA 37 keys colour touchscreen	5" WVGA 37 keys colour touchscreen
Key Illumination	X	✓	✓	✓ (with 5" WVGA screen)	✓	✓	✓	✓
Face II Display	X	•	•	• (with 5" WVGA screen)	•	•	✓	✓
Electronic Guide Light (EGL)	X	• (R1000 only)	• (R1000 only)	✓	✓	X	✓	✓
RS232 / SD / USB	✓	✓	✓	✓	✓	✓	✓	✓
BT / WLAN	X	✓	✓	✓	✓	✓	✓	✓
Mobile Data (GSM / UMTS / LTE)	X	•	•	X	X	X	X	X
Long Range BT Communication	X	X	X	• (with radio handle)	✓ (with radio handle)	✓ (with radio handle)	✓ (with radio handle)	✓ (with radio handle)
AutoHeight	X	•	✓	✓	✓	X	✓	✓
Overview camera	X	X	•	X	•	•	✓	✓
Telescope camera	X	X	X	X	X	•	✓	✓
SmartStation (GNSS) capability	X	X	X	•	•	•	•	•
Motorisation	X	X	X	DC drives	DC drives	Piezo drives	Piezo drives	Piezo drives
Automatic Target Aiming	X	X	X	✓ (ATR)	✓ (except TS16 M)	✓ (Long Range ATRplus)	✓ (ATRplus)	✓ (ATRplus)
Prism fast search	X	X	X	• (SpeedSearch)	• (PowerSearch)	X	✓ (PowerSearch)	✓ (PowerSearch)
Prism Lock	X	X	X	•	✓ (except TS16 M)	X	✓	✓
Scanning	X	X	X	X	X	X	X	✓ (up to 30'000 pts/s)
Autofocus	X	X	X	X	X	•	✓	✓
Laser Guide	X	X	X	X	✓ (on TS16 G)	X	X	X
Remote Control	X	Leica CS20 Leica CS30 / Leica CS35	Leica CS20 Leica CS30 / Leica CS35	Leica CS20 Leica CS30 / Leica CS35	Leica CS20 Leica CS30 / Leica CS35	Leica CS20 Leica CS30 / Leica CS35	Leica CS20 Leica CS30 / Leica CS35	Leica CS20 Leica CS30 / Leica CS35
AP20 Support	X	X	X	• AP20 H • AP20 ID ²	• ²	• ²	•	•
Operating time	30 h (GEB361)	30 h (GEB361)	Up to 19 h (GEB361)	Up to 8 h (GEB222)	Up to 8 h (GEB222)	Up to 9 h (GEB242)	Up to 9h (GEB242)	Up to 9h (GEB242)
Weight ³	4.3 kg	4.3 kg	4.4 kg	4.8 kg	5.1 kg	7.2 kg	7.3 kg	7.3 kg
Field Software	FlexField	FlexField	Captivate	Captivate (with 5" WVGA screen)	Captivate	Captivate	Captivate	Captivate
LOC8 ⁴	•	•	•	•	•	•	•	•

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 4. Tracking & theft deterrence device ✓ = Included • = Optional X = Not available