

Leica FlexLine TS03 Manual Total Station



FlexLine



LEICA FLEXLINE TS03 MANUAL TOTAL STATIONS

- **Work faster:** measure more points per day due to faster measurement and stakeout procedures (endless drives, trigger key, drives on both sides, pinpoint EDM and more), supported by our comprehensive and user-friendly Leica FlexField software.
- **Use it trouble-free:** increase productivity and minimise downtime by relying on instruments that simply work and come with a global service and support network.
- **Choose products that are built to last:** FlexLine operates with the same high level of quality even after years of use under harsh conditions (like mud, dust, blowing rain, extreme heat and cold).
- **Control your investment:** reliability, speed and accuracy ensure a lower investment over the product lifetime and a higher resell value.

The Leica FlexLine TS03 high-quality, manual total station is based on a proven product concept that has been revolutionising the world of measurement and survey for nearly 200 years. The instrument is equipped with a comprehensive application-based software package - Leica FlexField software - that enables most survey and stakeout tasks to be carried out easily and efficiently. The new FlexLine manual total stations work reliably and deliver accurate results even in harsh environments.

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ANGULAR MEASUREMENT

Accuracy Hz and V	Absolute, continuous, diametrical ¹	2" / 3" / 5"
	- Display resolution: 0.1" (0.1 mgon) - Quadruple dual axis compensation with Hz collimation and V index correction - Compensator setting accuracy²: 0.5" / 1" / 1.5" / 2" - Compensator range: +/- 4' - Electronic level resolution: 2" - Circular level sensitivity: 6' / 2 mm	✓

DISTANCE MEASUREMENT

Range	- Prism (GPR1, GPH1P): 0.9 m to 3,500 m - Prism GPR1 (Long Range mode) > 10,000 m - Non-Prism / Any surface - R500³	✓
Accuracy / Measurement time	Single prism 1 mm + 1.5 ppm (typical 1 - 2 s) Non-Prism / Any surface 0 m - 500 m: 2 mm + 2 ppm (typically 2.4 s⁴)	✓
	Display resolution: 0.1 mm	✓
Laser dot size	- At 30 m: 7 mm x 10 mm - At 50 m: 8 mm x 20 mm - At 100 m: 16 mm x 25 mm	✓
Telescope	- Magnification: 30x - Resolving power: 3" - Focusing range: 1.5 m / 4.92 ft to infinity - Field of view: 1°30' / 1.66 gon / 2.7 m at 100 m	✓

GENERAL

Display and keyboard		3.5" (inch), 320 x 240 px QVGA, grayscale, 28 keys
	2 nd keyboard	✗
Operation	- Endless drives for HZ & V - Trigger-Key: user definable with 2 functions	✓
Power management	Exchangeable Lithium-Ion battery ⁵ - Operating time with GEB361 - Operating time with GEB331	up to 30 h up to 15 h
	External supply voltage Nominal voltage 13.0 V DC & 16 W max	✓
Data storage	- Internal memory: 2 GB Flash - Memory card: SD card 1 GB or 8 GB - USB memory stick: 1 GB	✓
Processor	- Ti OMAP4430 1GHz Dual-core ARM® Cortex™ A9 MPCore™ - Operating system – Windows EC7	✓
Interfaces	RS232 ⁶ , USB device	✓
Laser plummet (Laserclass 2)	Accuracy - Plumb line deviation: 1.5 mm at 1.5 m instrument height - Diameter of laser point: 2.5 mm at 1.5 m instrument height	✓
Weight		4.3 kg
Environmental specifications ⁷	- Working temperature range: -20°C to +50°C - Dust / Water (IEC 60529) / Humidity: IP66 / 95%, non-condensing - Military Standard 810G, Method 506.5	✓
LOC8	Tracking and theft deterrence device	•

Legend:

- 1" (0.3 mgon), 2" (0.6 mgon), 3" (1 mgon), 5" (1.5 mgon), 7" (2 mgon)
- Angular accuracy / Compensator setting accuracy: 1" / 0.5" (0.2 mgon), 2" / 0.5" (0.2 mgon), 3" / 1.0" (0.3 mgon), 5" / 1.5" (0.5 mgon), 7" / 2.0" (0.7 mgon)
- R500: Kodak gray 90% reflective (1.5 m to >500 m), Kodak gray 18% reflective (1.5 m to >200 m)
- Up to 50 m, max. measurement time 15 s

- Distance/angle measurement every 30 seconds
- 5 PIN Lemo-0 for power, communication and data transfer
- Storage temperature: -40°C to +70°C

✓ = Included • = Optional



Laser radiation, avoid direct eye exposure.
Class 3R laser product in accordance with IEC 60825-1:2014.

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