## Leica FlexLine TS10 **Manual Total Station**



- software. The software is made to make your work easier and more enjoyable.
- 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: even after years of use under harsh conditions (like mud, dust, blowing rain, extreme heat and cold), FlexLine still operates with the same high level of quality.
- Control your investment: reliability, speed and accuracy ensure a lower investment over the product lifetime and a higher resell value.
- Save time with AutoHeight: this revolutionary feature enables the FlexLine TS10 manual total station to automatically measure, read and set the instrument height. Errors are minimised and the setup process onsite is faster.

The Leica FlexLine TS10 manual total station combines user-friendly, ergonomic design with high-end reliability under harsh conditions. It enables you to tie into the modern 3D dataflow, including enhanced linework and coding. The TS10 offers mobile data device integration as an option. The larger, highly visible colour- and touchscreen helps you to complete your surveying tasks with the highest speed and accuracy. The new FlexLine generation of manual total stations relies on a proven product concept that has been revolutionising the world of measurement and survey for nearly 200 years.













## Leica FlexLine TS10



Leica FlexLine TS10

ANGULAR MEAGURESTE		Leica FlexLille 1310
ANGULAR MEASUREMENT	Absolute, continuous, diametrical¹	1" / 2" / 3" / 5"
Accuracy Hz and V	<ul> <li>Display resolution: 0.1" (0.1 mgon)</li> <li>Quadruple axis compensation</li> <li>Compensator setting accuracy<sup>2</sup>: 0.5" / 1"/ 1.5"</li> <li>Compensator range: +/- 4'</li> </ul>	· · · · · · · · · · · · · · · · · · ·
	<ul> <li>Electronic level resolution: 2"</li> <li>Circular level sensitivity: 6' / 2 mm</li> </ul>	
DISTANCE MEASUREMENT	Circular level sensitivity: 6 / 2 mm	
	■ Prism (GPR1, GPH1P): 0.9 m to 3,500 m	
Range	■ Prism GPR1 (Long Range mode) > 10,000 m	······································
	Non-Prism / Any surface ■ R500³ ■ R1000⁴	·
Accuracy / Measurement time	Single prism  Precise+ / Once: 1 mm + 1.5 ppm (typical 2.4 s)  Once&Fast: 2 mm + 1.5 ppm (typical 2 s)  Continously: 3 mm + 1.5 ppm (typical < 0.15 s)  Averaging: 1 mm + 1.5 ppm  Long Range mode / > 4 km: 5 mm + 2 ppm (typical 2.5 s)	~
	Non-Prism / Any surface ■ 0 m - 500 m: 2 mm + 2 ppm (typical 2.4 s <sup>5</sup> ) ■ > 500 m: 4 mm + 2 ppm	~
aser dot size	<ul> <li>At 30 m: 7 mm x 10 mm</li> <li>At 50 m: 8 mm x 20 mm</li> <li>At 100 m: 16 mm x 25 mm</li> </ul>	v
<sup>-</sup> elescope	<ul> <li>Magnification: 30x</li> <li>Resolving power: 3"</li> <li>Focusing range: 1.55 m / 5.08 ft to infinity</li> <li>Field of view: 1°30' / 1.66 gon / 2.7 m at 100 m</li> </ul>	~
JENERAL		
Display and keyboard	5" (inch), 800 x 480 pixels WVGA, colour and touch  25 keys <sup>6a</sup> 37 keys <sup>6a</sup>	· ·
	■ 37 keys with function keys <sup>6b</sup> 2nd keyboard	
	Key illumination	<b>V</b>
Operation	■ Endless drives for HZ & V	·
	<ul> <li>Trigger-Key: user definable with 2 functions</li> <li>Exchangeable Lithium-Ion battery<sup>7</sup></li> </ul>	
Power management	<ul> <li>Operating time with GEB364</li> <li>Operating time with GEB334</li> </ul>	up to 26 h up to 13 h
	Battery charging time with GKL341 charger for GEB364 / GEB334 GKL311 charger for GEB364 / GEB334	3 h 30 min / 3 h 6 h 30 min / 3 h 30 min
	External supply voltage ■ Nominal voltage 13.0 V DC & 16 W max	<b>v</b>
Oata storage	<ul><li>Internal memory: 4 GB Flash</li><li>Memory card: SD card 1 GB or 8 GB</li></ul>	<b>v</b>
Processor	<ul> <li>USB memory stick: 1 GB</li> <li>TI OMAP4430 1GHz Dual-core ARM® Cortex™ A9 MPCore™</li> </ul>	
nterfaces	<ul> <li>Operating system – Windows EC7</li> <li>RS2328, USB device</li> </ul>	~
ITELIACES	RS232°, OSB device Bluetooth®°, WLAN <sup>10</sup>	
	Mobile Data sidecover: LTE-Modem for internet access	•
uide Light (EGL)	<ul> <li>Working range: 5 m to 150 m</li> <li>Position accuracy: 5 cm at 100 m</li> <li>Wavelength red /orange: 617 nm / 593 nm</li> </ul>	(R1000)
aser 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	~
utoHeight module for automatic nstrument height measurement Laserclass 2)	Accuracy Distance accuracy: 1.0 mm (1 Sigma) Distance range: 0.7 m to 2.7 m	·
Veight		4.4 - 4.9 kg
Environmental	<ul> <li>Working temperature range: -20°C to +50°C<sup>11</sup></li> <li>Arctic version: -35°C to +50°C</li> </ul>	· ·
pecifications	<ul> <li>Arctic version: -35°C to +50°C</li> <li>Dust / Water (IEC 60529) / Humidity: IP66 / 95%, non-condensing</li> <li>Military Standard 810G, Method 506.5</li> </ul>	· ·
maging	5 megapixel CMOS sensor	•
maging	Overview camera with field of view 19.4°	· ·

- Legend:
  1. 1" (0.3 mgon), 2" (0.6 mgon), 3" (1 mgon), 5" (1.5 mgon)
  2. 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)
  3. R500: Kodak gray 90% reflective (0.9 m to >500 m), Kodak gray 18% reflective (0.9 m to >200 m)
  4. R1000: Kodak gray 90% reflective (0.9 m to >1000 m), Kodak gray 18% reflective (0.9 m to >500 m)
  5. Up to 50m, max. measurement time 15s



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

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## Leica Geosystems AG

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- 6. (a) Face I standard, face II optional, (b) face I optional, face II optional
  7. Continuous angle measurement, new battery
  8. 5 PIN Lemo-0 for power, communication and data transfer
  9. For communication and data transfer
  10. For internet access, communication and data transfer, WLAN range up to 200 m
  11. Storage temperature: -40°C to +70°C

✓ = Included • = Optional X = Not available

