

# Leica FlexLine TS02 Total Station



## Leica FlexLine TS02 Total Station – Ideal Today, perfect Tomorrow

The ideal Total Station for standard measurement tasks. Designed especially for mid-to-low accuracy applications. It comes complete with a standard set of application software that guide you through your daily work. If more convenient, use *Bluetooth®* wireless technology to connect any data collector and use the Software which best suits your task and familiarity.

Whether you measure to prisms, or prefer direct measurements to objects, the choice is always yours. A selection of EDM options delivers exactly what you need.

With a FlexLine TS02 Total Station you'll complete your measurement tasks today and tomorrow, faster and more reliable than ever before.



### **Bluetooth® Option**

- Cable-free connection
- License-free communication
- Select any familiar data collector and Software



### **USB Option**

- Trouble-free USB plug-and-play technology
- USB memory stick for flexible data transfer
- mini-USB for fast data transfer



### **Alpha-numerical Keyboard Option**

- Rapid entry of numbers, letters and special characters
- Minimizes errors
- Enhance productivity

- when it has to be **right**

**Leica**  
Geosystems

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Angle Measurement (Hz, V)		
Accuracy (Standard deviation ISO-17123-3)	3" (1 mgon), 5" (1.5 mgon), 7" (2 mgon)	optional
Method	Absolute, continuous, diametrical	
Display resolution	0.1" / 0.1 mgon / 0.01 mil	
Compensation	Quadruple axis compensation (Setting On, Off)	
Compensator Setting accuracy	1", 1.5", 2"	



Distance Measurement with Reflector		
Range Round prism GPR1	3'500 m	
Range Reflective tape (60 mm x 60 mm)	250 m	
Accuracy / Measurement time (Standard deviation ISO-17123-4)	Standard: 1.5 mm+2 ppm / typ. 2.4 s, Fast: 3 mm+2 ppm / typ. 0.8 s, Tracking: 3 mm+2 ppm / typ. <0.15 s	



Distance Measurement without Reflector		
Range (90% reflective)		
FlexPoint	30 m	optional
PinPoint – Power	>400 m	optional
PinPoint – Ultra	>1000 m	optional
Accuracy / Measurement time (Standard deviation ISO-17123-4)	2 mm+2 ppm <sup>2</sup> / typ. 3 s	
Laser dot size	At 30 m: approx. 7 mm x 10 mm, At 50 m: approx. 8 mm x 20 mm, At 250 m: approx. 30 mm x 55 mm	



Data storage / Communication		
Internal memory	Max.: 24'000 fixpoints, Max.: 13'500 measurements	
USB memory stick	1 Gigabyte, Transfer time 1'000 points/second	optional
Interfaces	Serial (Baudrate 1'200 to 115'200) USB Type A and mini B, Bluetooth® Wireless	optional
Data formats	GSI / DXF / LandXML / user definable ASCII formats	



Emitting Guide Light for Stake Out (optional)		
Working Range (average atmospheric conditions)	5 m – 150 m	optional
Positioning accuracy	5 cm at 100 m	optional



General		
Telescope		
Magnification	30 x	
Resolving power	3"	
Field of view	1° 30' (1.66 gon) / 2.7 m at 100 m	
Focusing range	1.7 m to infinity	
Reticle	Illuminated, 5 brightness levels	
Keyboard and Display		
Display	Graphics, 160 x 280 pixels, illuminated, 5 brightness levels	
Keyboard	Standard keyboard Alpha-numerical keyboard, Second keyboard	optional
Operating System		
Windows CE	5.0 Core	
Laserplummet		
Type	Laser point, 5 brightness levels	
Centering accuracy	1.5 mm at 1.5 m Instrument height	
Battery		
Type	Lithium-Ion	
Operating time	approx. 20 hours <sup>1</sup>	
Weight		
Total Station including GEB211 and tribrach	5.1 kg	
Environmental specifications		
Temperature range (operation)	-20° C to +50° C (-4° F to +122° F) Arctic Version -35° C to 50° C (-31° F to +122° F)	optional
Dust & splash proof (IEC 60529)	IP55	
Humidity	95%, non condensing	



FlexField Onboard Software		
Application programs	Topography (Orientation & Surveying), Stake Out, Resection, Height Transfer, Construction, Area (Plan & Surface), Volume calculation, Tie Distance (MLM), Remote Height, Hidden Point, Offset, Reference Line	
Application programs	Reference Arc, Reference Plane, COGO, Road 2D	optional

<sup>1</sup> Single Measurement every 30 second at 25° C with GEB221. Battery time may be shorter if battery is not new.

<sup>2</sup> Range >500 m 4 mm+2 ppm



**Total Quality Management –  
our commitment to total  
customer satisfaction.**

**Guide light (EGL):**  
LED class 1 in accordance  
with IEC 60825-1 resp.  
EN 60825-1

**Distance meter:**  
(PinPoint R400 / R1000):  
Laser class 3R in accordance  
with IEC 60825-1 resp.  
EN 60825-1

**Laser plummet:**  
Laser class 2 in accordance  
with IEC 60825-1 resp.  
EN 60825-1

**Distance meter:**  
(Prism Mode)  
Laser class 1 in accordance  
with IEC 60825-1 resp.  
EN 60825-1

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