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, e.g. the Leica CS10/15. Use SmartWorx Viva or 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 (GSI, DXF, ASCII, LandXML, CSV)
- Mini-USB for fast data transfer

Alpha-numerical Keyboard Option
- Rapid entry of numbers, letters and special characters
- Minimizes errors
- Enhances productivity

- when it has to be **right**

Leica Geosystems

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Angle Measurement (Hz, V)		
Accuracy (Standard deviation ISO-17123-3)	2" (0.6 mgon), 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	0.5", 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[3]	optional
PinPoint – Ultra	>1000 m[3]	optional
Accuracy / Measurement time (Standard deviation ISO-17123-4)	2 mm+2 ppm[2] / typ. 3 s	
Laser dot size	At 30 m: approx. 7 mm x 10 mm, At 50 m: approx. 8 mm x 20 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 / CSV / 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[1]	
Weight		
Total Station including GEB211 and tribrach	5.1 kg	
Environmental		
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), DTM Volume calculation, Tie Distance (MLM), Remote Height, Hidden Point, Backsight Check, Offset, Reference Line	
Application programs	Reference Arc, Reference Plane, COGO, Road 2D	optional

[1] Single Measurement every 30 second at 25° C. Battery time may be shorter if battery is not new. Internal battery GEB 221.

[2] Range >500 m 4 mm+2 ppm

[3] Atmospheric conditions: Day, night and twilight

Swiss Technology by Leica Geosystems

Design:
D605.959

TQM ISO 9001 / ISO 14001

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:
(PintPoint 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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