

# Leica FlexLine TS02plus

## Best-In-Class Precision



- when it has to be **right**

**Leica**  
Geosystems

# Leica FlexLine plus

## Proven Specifications, Reliable Instruments

Angle Measurement (Hz, V)		
Accuracy <sup>1)</sup>	3" (1 mgon) / 5" (1.5 mgon) 7" (2 mgon)	✓
Method	Absolute, continuous, diametrical: at all models	✓
Display resolution	0.1" / 0.1 mgon / 0.01 mil	✓
Compensation	Quadruple Axis compensation: at all models	✓
Compensator Setting Accuracy	1" / 1.5" / 2"	✓
Distance Measurement with Reflector		
Range <sup>2)</sup> Round prism (Leica GPR1)	3.500 m	✓
Range <sup>2)</sup> Reflective tape (60 mm x 60 mm)	250 m > 500 m <sup>8)</sup>	✓
Accuracy <sup>3)</sup>	Precise+: 1.5 mm + 2.0 ppm Precise Fast: 2.0 mm + 2.0 ppm Tracking: 3.0 mm + 2.0 ppm	✓
Typical Measurement time <sup>4)</sup>	2.0 s	✓
Distance Measurement without Reflector <sup>7)</sup>		
Range <sup>5)</sup> PinPoint R500	500 m	○
Accuracy <sup>3)</sup>	2 mm + 2 ppm	✓
Laser dot size	At 30 m: approx. 7 x 10 mm At 50 m: approx. 8 x 20 mm	✓
Data storage / Communication		
Internal memory	Max.: 24'000 fixpoints, Max.: 13'500 measurements	✓
Interfaces	Serial (Baudrate up to 115'200)	✓
Data formats	GSI / DXF / LandXML / CSV / user definable ASCII formats	✓
Telescope		
Magnification / Resolving power	30 x / 3"	✓
Field of View	1° 30' (1.66 gon) 2.7 m at 100 m	✓
Focusing range	1.7 m to infinity	✓
Reticle	Illuminated, 10 brightness levels	✓

Keyboard and Display		
Keyboard and Display	Simple Alpha-numerical keyboard with high resolution Black & White display, Graphics, 160 x 288 pixels, display illuminated, 5 brightness levels	✓
Position	Face I, Face II	✓○
Operating System		
Windows CE	5.0 Core	✓
Laserplummet		
Type	Laser point, 5 brightness levels	✓
Centering accuracy	1.5 mm at 1.5 m	✓
Battery		
Type	Lithium-Ion	✓
Operating time <sup>6)</sup>	approx. 30 hours	✓
Weight		
TS 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)	✓ ○
Dust / Water (IEC 60529) Humidity	IP55, 95%, non condensing	✓
Leica FlexField plus Onboard Software		
<b>Included Application Programs:</b> Survey; Stake Out; Station Setup including: Resection, Local Resection, Helmert Resection, Orientation (Angles & Coordinates), Height Transfer; Area (Plan & Surface); DTM Volume calculation; Tie Distance (MLM); Remote Height; Hidden Point; Backsight Check; Offset; Reference Line;		✓
<b>Extra Application Programs:</b> Reference Arc; Reference Plane; COGO; Road 2D		○
Theft protection		
mySecurity, PIN/PUK Code		✓✓

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### Model Comparison: Configurations & Options of Manual Total Stations

	TS02plus	TS06plus	TS09plus	Viva TS11
1" angular accuracy	-	○	○	○
Enhanced measurement accuracy to prism	1.5 mm + 2 ppm	1.5 mm + 2 ppm	1.5 mm + 2 ppm	1.0 mm + 1.5 ppm
Reflectorless measurement range	500 m option	500 m included/1000 m option	500 m included/1000 m option	500 m included/1000 m option
Display with graphics and display illumination	Black & White high resolution	Black & White high resolution	Q-VGA Color & Touch	Full-VGA Color & Touch
Full alpha-numerical keyboard with function keys	-	✓	✓	✓
Second Keyboard	○	○	○	○
Keyboard illumination	-	-	✓	✓
Electronic Guide Light	-	○	✓	✓
USB Type A and mini B	-	✓	✓	✓
Bluetooth® Wireless	-	✓	✓	✓
SD Card	-	-	-	✓
Imaging capability	-	-	-	○
Smart Station GNSS capability	-	-	-	○
Onboard software (package content)	FlexField plus (standard)	FlexField plus (advanced)	FlexField plus (full)	SmartWorx Viva (pro)

#### Legend:

- 1) Standard deviation ISO-17123-3
- 2) Overcast, no haze, visibility about 40 km;  
no heat shimmer.
- 3) Standard deviation ISO-17123-4
- 4) Prism Precise Fast mode

- 5) Under optimal conditions on Kodak  
Grey Card (90% reflective). Maximum range  
varies with atmospheric conditions, target  
reflectivity and surface structure.
- 6) Single Measurement every 30 second at 25° C.  
Battery time may be shorter if battery is not new.  
Internal battery GEB222.

- 7) Reflectorless measurement time may vary  
according to measuring objects, observation  
situations and environmental conditions.
- 8) with R500 option using Non-prism mode

- ✓ Included
- Option
- Not available



Total Quality Management -  
our commitment to total  
customer satisfaction.

Distance meter:  
(PinPoint R500):  
Laser class 3R 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

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

Cover picture:  
Los Angeles skyline

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