FlexLine plus

Leica FlexLine TS06plus
Top Precision meets
High Efficiency

- when it has to be **right**

Leica
Geosystems

The First Plus:
Original Leica Geosystems Quality

For most, "quality" is relative. Not so at Leica Geosystems. To ensure our instruments meet the highest precision and quality requirements, we manufacture them in state-of-the-art facilities around the world. Swiss technology combines with exceptional craftsmanship to provide best-in-class devices. And this quality also applies to all of our procedures – moving Leica Geosystems towards business excellence to meet our customers' needs and expectations in every way. The Leica FlexLine TS06plus Manual Total Station is ideal for many daily surveying tasks, especially for mid- to high-accuracy applications. Banking on the heritage of the previous Leica TS06 model, the most successful of the Leica FlexLine Series, the Leica FlexLine TS06plus is the newest ultimate Total Station.

Welcome to the world of Leica Geosystems. Welcome to a world of people, technologies, services and devices, that you can completely rely on.

ACTIVE customer care

my world
@Leica Geosystems

The Third Plus:
Top Precision, Speed and Efficiency

The claim "easy to operate" seems to be everywhere. Whether this promise can be kept only becomes apparent in the practice. Because professional measurement experts were involved in its development, the Total Station Leica FlexLine TS06plus allows you to work quickly and effectively right from the first day.

Electronic Distance Measurement:
Wherever high-distance measurement accuracy is required, you can face the challenge of this demanding task with the TS06plus. It provides the most accurate Electronic Distance Measurement.

Prism Mode
- Precision+ (1.5 mm + 2 ppm)
- Speed (1 second)

Non-Prism Mode
- Precision (2 mm + 2 ppm)
- PinPoint EDM with coaxial, small laser pointer and measurement beam for accurate aiming and measuring
- Fewer set-ups required, because targets on which it is not possible to set up a reflector can be measured using reflectorless measurement up to 1.000
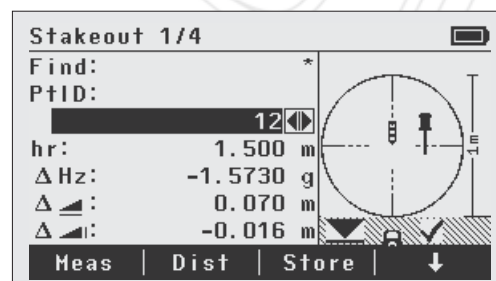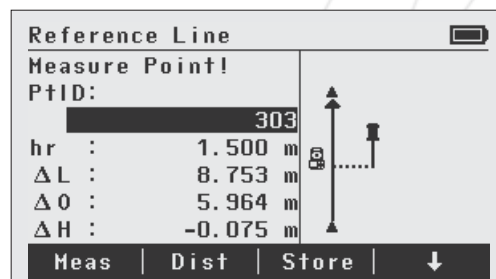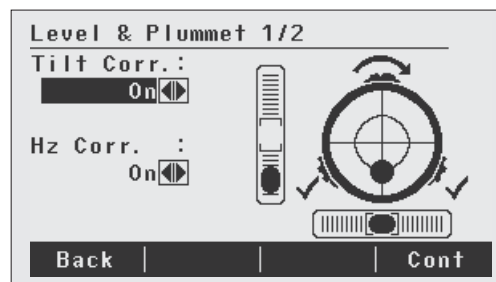
The Leica FlexLine TS06plus Communication Side Cover enables cable-free connection to any data collector via Bluetooth, for example the field-controllers Leica Viva CS10 or Leica Viva CS15 with SmartWorks Viva software. The USB-stick enables the flexible transfer of such data as GSI, DXF, ASCII, LandXML and CSV.

Built-in user friendliness: The full alpha-numerical keyboard.
The Leica TS06plus standard built-in alpha-numerical keyboard enables fast and easy entry of numbers, letters and special characters, e.g. for coding. It increases the work speed while at the same time reducing possible sources of error.

FlexField plus Onboard Software: Easy to use due to it's graphical guidance and intuitive workflows.

Leica Geosystems – mySecurity
mySecurity gives you total peace of mind. If your instrument is ever stolen, a locking mechanism is available to ensure that the device is disabled and can no longer be used.

Leica FlexLine Plus
Proven Specifications, Reliable Instruments

Leica FlexLine TS06plus specifications:

Angle Measurement (Hz, V)		
Accuracy [1]	1" (0.3 mgon) / 2" (0.6 mgon) 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	0.5" / 0.5" / 1" / 1.5" / 2"	✔

Distance Measurement with Reflector		
Range [2] Round prism (Leica GPR1)	3.500 m	✔
Range [2] Reflective tape (60 mm x 60 mm)	>500 m [9] >1000 m [10]	✔
Range [2] Prism-Long (Leica GPR1, R500/R1000)	>10.000 m	✔
Accuracy [3]	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 [4]	1.0 s	✔

Distance Measurement without Reflector [8]		
Range [5] PinPoint R500 / R1000	> 500 m / > 1000 m	✔O
Accuracy [3][6]	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.: 100'000 fixpoints, Max.: 60'000 measurements	✔
Interfaces	- Serial (Baudrate up to 115'200) - USB Type A and mini B, - Bluetooth® Wireless, class 1, 150 m - > 1000 m (with TCPS29)	✔ ✔ ✔ O
Data formats	GSI / DXF / LandXML / CSV / user definable ASCII formats	✔

Guide Light (EGL)		
Working Range (average atmospheric conditions)	5 m – 150 m	O
Positioning accuracy	5 cm at 100 m	O

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, 10 brightness levels	✔

Keyboard and Display		
Keyboard and Display	Full Alpha-numerical keyboard with high resolution Black & White display, Graphics, 160 x 288 pixels, display illuminated, 5 brightness levels	✔
Position	Face I, Face II	✔O

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 [7]	approx. 30 hours	✔

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)	O
Dust / Water (IEC 60529) Humidity	IP55, 95%, non condensing	✔

Leica FlexField plus Onboard Sofware		
Included Application Programs: Topography; 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; Reference Arc; Reference Plane; Road 2D; COGO		✔
Extra Application Programs: Road 3D, Traverse		O

Theft protection		
mySecurity, PIN/PUK Code		✔✔

Model Comparison: Configurations & Options of Manual Total Stations

	TS02plus	TS06plus	TS09plus	Viva TS11
1" angular accuracy	–	O	O	O
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	O	O	O	O
Keyboard illumination	–	–	✔	✔
Electronic Guide Light	–	O	✔	✔
USB Type A and mini B	–	✔	✔	✔
Bluetooth® Wireless	–	✔	✔	✔
SD Card	–	–	–	✔
Imaging capability	–	–	–	O
Smart Station GNSS capability	–	–	–	O
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) Range > 500m 4mm+2ppm
7) Single Measurement every 30 second at 25° C. Battery time may be shorter if battery is not new. Internal battery GEB222.

8) Reflectorless measurement time may vary according to measuring objects, observation situations and environmental conditions.
9) with R500 option using Non-prism mode
10) with R1000 option using Non-prism mode

✔ Included
O Option
– Not available

The Second Plus:
Real Features, True Benefits

USB Stick
- For fast and easy transfer of data

Wireless Bluetooth
- For cable-free connection to data logger

PinPoint EDM
- The most precise in its class (1.5 mm + 2 ppm)
- Extremely fast (1 second)
- > 1.000 meters without prism
- Coaxial laser pointer and measurement beam

Electronic Guide Light
- For faster stake-out

Alpha-numerical keyboard
- Fast and error-free input

FlexField plus
- Modern and intuitive on-board software for higher productivity

Large high-resolution display
- At-a-glance viewing on the largest high-resolution display in its class

Useful tools
- A range of tools, such as a trigger key and laser plummet, speed up your work

Arctic version
- For use at −35°C (−31°F)

mySecurity
- Unique cloud-based protection against theft

**Scan the code
to play
the videos!**

Whether you want to survey a parcel of land or objects on a construction site, determine measured points on facades or in rooms, gather the coordinates of a bridge or a tunnel – Leica Geosystems' total stations provide the right solution for every application.
They unite reliable results with easy operation and user-friendly applications. Our total stations are designed to meet your specific requirements. Modern technology enables you to work fast and productively, thanks to the straightforward and clearly structured range of functions.

- when it has to be right.

Swiss Technology
by Leica Geosystems

TQM
ISO 9001 / ISO 14001

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

Distance meter:
(PinPoint R500 / 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

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

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Cover picture: Dubai City Skyline

**FlexLine
TS02plus**
Brochure

**FlexLine
TS09plus**
Brochure

**FlexField plus &
FlexOffice**
Brochure

Viva TS11
Brochure

**Original
Accessories**
Brochure

Please visit www.leica-geosystems.com
for detailed information about Leica FlexLine plus
and more documents.

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