Leica FlexLine TS06plus
Top precision meets high efficiency

- when it has to be right
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 TS06 model, the most successful of the Leica FlexLine Series, the 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.
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 metres 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 theft protection locking mechanism
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 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 CS20 controller or Leica CS35 tablet with Captivate 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 on-board software: Easy-to-use due to its 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 TS06plus
Proven specifications, reliable instruments

ANGLE MEASUREMENT (H, V)

Accuracy ²) ¹)
1° (0.3 mgon) / 2° (0.6 mgon) / 3° (1 mgon) / 5° (1.5 mgon)
7° (2 mgon)

Method
Absolute, continuous, diametrical: all models

Display resolution
0.1° / 0.1 mgon / 0.01 mrad

Compensation
Quadruple axis compensation: at all models

Compensator setting accuracy
0.5° / 0.5° / 1° / 1.5° / 2°

Compensator range
0.07 gon

Endless drives
Smooth movements with no delayed response time

DISTANCE MEASUREMENT WITH REFLECTOR

Range ²) Round prism (Leica GPR1)
3,500 m

Range ²) Reflective tape
(50 mm x 60 mm)
>500 m

Range ²) Prism-Long (Leica GPR1, R500/R1000)
>10,000 m

Accuracy ²)²²)
Precision: 1.5 mm + 2.0 ppm
Precise Fast: 2.0 mm + 2.0 ppm
Tracking: 3.0 mm + 2.0 ppm

Typical measurement time ²²)²²)
1.0 s

Measurement time while in
"Precise+" mode
2.4 s

DISTANCE MEASUREMENT WITHOUT REFLECTOR

Range ²) PinPoint R500 / R1000
> 500 m / > 1000 m

Accuracy ²)²²)
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 topocentres
Max.: 60,000 measurements

Interfaces
– Serial (Baudrate up to 115200)
– USB Type A and mini B,
– Bluetooth ² Wireless, class 1,
– TCP/IP (non-EUR) > 1000 m
– TCP/IP (EUR) > 500 m

Data formats
GSI / DXF / LandXML / CSV / user definable ASCII formats

GUIDE LIGHT (EGL)

Working Range
(average atmospheric conditions)
5 m – 150 m

Positioning accuracy
5 cm at 100 m

TELESCOPE

Magnification
30 x

Resolving power
3°

Field of View
1° 30’ (1.66 gon)

Focusing range
2.7 m at 100 m

Reticule
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

OPERATING SYSTEM

Windows CE
5.0 Core

LASERPLUMMET

Type
Laser point, 5 brightness levels

Centreing accuracy
1.5 mm at 1.5 m instrument height

BATTERY

Type
Lithium-Ion

Operating time ³)
Approx. 30 hours

Battery charging time
2.3 hours

WEIGHT

Total station including GEB211 and
trinbrach
5.1 kg

ENVIRONMENTAL

Temperature range (operation)
–20° C to +60° 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

Included Application Programs:
Survey incl. Map View; Stake Out; Stati-
on Setup including: Resection, Local Resection, Helmert Re section, Orien-
tation (Angles & Coordinates), Height Transfer; Area (Plan & Surface);
DTM Volume calculation; Tie Distance (MLM); Remote Height; Hidden
Point; Backsight Check; Offset; Reference Line; Reference Plane;
Road 2D; COGO

Extra Application Programs:
Road 3D, Tunnel, Traverse

THEFT PROTECTION

mySecurity, PIN/PUK Code

Model Comparison: Configurations & Options of Manual Total Stations

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<td>FlexField plus (full)</td>
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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) Reflectoreless 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
Optional
Not available
Revolutionising the world of measurement and survey for nearly 200 years, Leica Geosystems creates complete solutions for professionals across the planet. Known for premium products and innovative solution development, professionals in a diverse mix of industries, such as aerospace and defence, safety and security, construction, and manufacturing, trust Leica Geosystems for all their geospatial needs. With precise and accurate instruments, sophisticated software, and dependable services, Leica Geosystems delivers value every day to those shaping the future of our world.

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