Engaging software

The Leica GS18 T is accompanied with the revolutionary Captivate software, turning complex data into the most realistic and workable 3D models. With easy-to-use apps and familiar touch technology, all forms of measured and design data can be viewed in all dimensions. Leica Captivate spans industries and applications with little more than a simple swipe, regardless of whether you work with GNSS, total stations or both.

Seamlessly share data among all your instruments

Leica Infinity imports and combines data from your GNSS RTK rover, total station and level instruments for one final and accurate result. Processing has never been made easier when all your instruments work in tandem to produce precise and actionable information.

ACC

Customer care only a click away

Through Active Customer Care (ACC), a global network of experienced professionals is only a click away to expertly guide you through any challenge. Eliminate delays with superior technical service, finish jobs faster and avoid costly site revisits with excellent consultancy support. Control your costs with a tailored Customer Care Package (CCP), giving you peace of mind you are covered anywhere, anytime.
Leica GS18 T

GNSS TECHNOLOGY

Self-learning GNSS
Leica RTKplus
SmartLink (worldwide correction service)
Leica SmartCheck
Continuous check of RTK solution
Reliability 99.99%

Signal tracking
GPS (L1, L2, L2C, L5), Glonass (L1, L2, L2C, L3), Beidou (B1, B2, B3), Galileo (E1a, E1b, E5a, E5b), QZSS (L1, L2, L5, L6), NavIC L5, SBAS (WAAS, EGNS, MSAS, GACAN), L-band

Number of channels
555 (more signals, fast acquisition, high sensitivity)

Tilt compensation
Increased measurement productivity and traceability
 Calibration-free
Immune to magnetic disturbances

MEASUREMENT PERFORMANCE & ACCURACY

Time for initialisation
Typically 4 s

Real-time kinematic
Single baseline
Hz 8 mm + 1 ppm / V 15 mm + 1 ppm

Real-time kinematic tilt compensated
Topographic points (not for static control points)
Additional Hz pole tip uncertainty typically less than 8 mm + 0.4 mm² tilt down to 30° tilt

Post processing
Static (phase) with long observations
Hz 3 mm + 0.1 ppm / V 3.5 mm + 0.4 ppm
Hz 3 mm + 0.5 ppm / V 5 mm + 0.5 ppm

Code differential
DGPS / RTCM
Typically 25 cm

COMMUNICATIONS

Communication ports
Lemo
USB and RS232 serial

Communication protocols
RTK data protocols
Leica, Leica AG, GfK, NMEA v4.00 and Leica proprietary

Built-in data links
GSW / UMTS / LTE phone modem
Fully integrated, external antenna

External data links
GSM / GPRS / UMTS / LTE / CDMA and UHF / VHF modem

GENERAL

Field controller and software
Leica Captivate software
Leica CS20 field controller, Leica CS35 tablet

User interface
Buttons and LEDs
On / Off and Function buttons, 8 status LEDs

Data recording
Storage
Removable SD card, 8 GB

Power management
Internal power supply
Exchangeable Li-Ion battery (2.8 Ah / 11.1 V)

Weight and dimensions
Weight
1.20 kg / 3.50 kg standard RTK rover setup on pole

Environmental
Temperature
-40 to 65°C operating, -40 to 85°C storage

Humidity
95% (ISO9022-13-06 / ISO9022-12-04 / MIL STD 810G-1 506.6 II)

Vibration
Withstands strong vibration (ISO2222-36-08 / MIL STD 810G 514.6 Cat.24)

Initial convergence to full accuracy 20 - 40 min, Re-convergence < 1 min
Bridge of RTK outages up to 10 min (3 cm 2D)

Additional Hz pole tip uncertainty typically less than 8 mm + 0.4 mm² tilt down to 30° tilt

555 (more signals, fast acquisition, high sensitivity)

Leica Geosystems AG is part of Hexagon AB. 866429en - 06.18

Copyright Leica Geosystems AG, 9435 Heerbrugg, Switzerland. All rights reserved. Printed in Switzerland – 2017.