LT500T

GIS Data Collection

- Multiple models covering from centimeter to sub-meter accuracy
- 1 GHz high-speed CPU, 512 MB RAM, 16 GB flash memory
- 4.3'' high resolution sunlight readable screen
- 3.75G network modem
- Optional barcode scanner

LT500T is tough and built to last. Lightweight and compact, it fits in one hand, with the largest, best-in-class screen and a dust and water resistance IP67 rating.

LT500T is designed for high accuracy projects, requiring correctness to decimeter level. It is especially useful in utility applications as underground pipeline wapping and land records management.

Meanwhile, LT500T supports to enable the L1 RTK function through update code to reach 2 cm accuracy.

■ Technical Specifications

GNSS Characteristics
- 220 channels with all in view simultaneously tracked satellite signals
    - GPS: L1 C/A
    - GLONASS: L1 C/A
    - Galileo: E1
    - BDS: B1
    - SBAS: L1 C/A (QZSS L1 C/A, L1 SAIF)
- Update Rate: 1 Hz, up to 50Hz
- Cold Start: < 45 s
- Hot Start: < 30 s
- Re-acquisition: < 2 s

GNSS Accuracies[1]
- Real Time Kinematic (RTK):
    - Fixed: 2 cm + 1 ppm RMS (> 5 min)
- Post-processing Static: 10cm RMS
- DGPS: 25 cm RMS
- SBAS[2]:
    - Horizontal: 50 cm RMS
    - Vertical: 85 cm RMS

System Configuration
- Operating System: Windows® Embedded Handheld 6.5 Professional
- 4.3" sunlight readable touch screen
- Resolution: WVGA 480 X 800
- 1 GHz CORTEX® A8 processor
- RAM: 512 MB
- Internal Memory: 16 GB
- External Memory: Micro SD, up to 32 GB
- Camera: 5 megapixel

Communications
- Network Modem
    - UMTS/HSPA+ 800/850/900/1900/2100 MHz
    - EDGE/GPRS/GSM 850/900/1800/1900 MHz

- Bluetooth®: V2.1 + EDR
- WiFi: 802.11 b/g
- USB: Mini USB
- Protocols:
    - CMR, CMR+, SCMRX input and output
    - RTCM 2.x, RTCM 3.x input and output
    - NMEA 0183 output

Physical
- Size (L x W x H): 236 mm x 97 mm x 77 mm (9.3 in x 3.8 in x 3.0 in)
- Weight: 897 g (31.6 oz) with battery
- Environment
    - Operating: –30°C to +70°C (–22°F to +158°F)
    - Storage: –40°C to +80°C (–40°F to +176°F)
- Humidity: 100% condensation
- Dust and Water Proof: IP67
- Shock and Vibration: 1.2 m (3.9 ft) fall onto concrete, MIL-STD-810G, Method 514.7
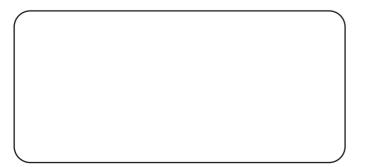
Electrical
- Li-ion Battery Capacity: 2600 mAh, 11.1 V
- Operating Time[3]: Up to 10 (autonomous GNSS usage)
- Charging Time: 4 h (typical)

Sensors
- Gyroscope
- Laser plummet
- G-sensor
- Bar code scanner (optional)

(1) Accuracy and reliability specifications may be affected by multipath, satellite geometry and atmospheric conditions. Performances assume the minimum of 5 satellites, follow up of recommended general GPS practices. (2) Typical observed values, the best value is up to 30 cm RMS. (3) Operating time varies based on temperature.

Specifications are subject to change without notice.