

Survey is never a simple matter until you meet L6T. The L6T receiver, with advanced algorithm built in, which supports all existed and planned constellations and ground augmentation systems. The integrated powerful long-range UHF modem and full network mode make the field work more efficient and reliable. Even if there is no any radio signal or GPRS reception, the work still can be done by using our powerful cm-level satellite correction service. There is no any problem neither to complete the job if there is very less satellites or just single constellation, cause the L6T fully supports processing BEIDOU or Galileo signal independently. It is suitable for surveying work in all environment, all weather and all kinds of job.

KEY FEATURES

Wonderful design

Military-grade processing technology, magnesium alloy design, complete electromagnetic compatibility and shielding technology to minimize system electromagnetic interference and ensure high-quality observation data and results.

Strong radio

The compact body has powerful cooling technology, which can perfectly support the use of 5w radio, with a range of up to 10km.

User-friendly operation

Equipped with high brightness and low power consumption OLED display, it can see the real-time working status and power information of receiver at a glance. The reasonable button design realized to set receiver quickly and easily even without controller.

Global satellite correction service

Advanced RTX service that accepts L-band satellite corrections for global stand-alone centimeter-level positioning. With this, you can survey in anywhere without having local reference stations, or without any correction service. The correction resume function can make the receiver continue working over 5 min when the correction is no longer streaming from stations.

IMU survey

IMU survey, which is the most advanced tilt compensation technology up to now. The GNSS receiver can real time calculate the accurate position with the data which supplied by the IMU unit. It gets rid of the affects of magnetic fields when compares to the general tilt sensor. Without levelling the pole, and even when the tilt angle is more than 30, it still can get a good accuracy result. It makes the tilt survey much faster, more reliable and productive. The IMU L6T really realizes 'fast survey and go'.



LEGEND

MODEL L6T



α-GEO TURNING THE ORDINARY INTO THE EXTRAORDINARY

PERFORMANCE SPECIFICATIONS

MEASUREMENTS

- ◆ 336 Tracking Channels
- ◆ Satellite signals tracked simultaneously
 - GPS: L1C/A, L1C, L2C, L2E, L5
 - GLONASS: L1C/A, L1P, L2C/A, L2P, L3
 - SBAS: L1C/A, L5 (Just for the satellites supporting L5)
 - Galileo: E1, E5A, E5B, E5 AltBOC, E6
 - BDS: B1, B2, B3
 - RTX, QZSS, WAAS, MSAS, EGNOS, GAGAN, SBAS
- ◆ Positioning rates
 - 1Hz, 2Hz, 5Hz, 10Hz, 20Hz, and 50Hz
- ◆ Initialization time < 10s
- ◆ Initialization reliability >99.99%

POSITIONING

- ◆ Code differential GNSS positioning
 - Horizontal: 0.25 m + 1 ppm RMS
 - Vertical: 0.50 m + 1 ppm RMS
 - SBAS differential positioning accuracy: typically <5m 3DRMS
- ◆ Static GNSS surveying
 - Horizontal: 3 mm + 0.1 ppm RMS
 - Vertical: 3.5m m + 0.4 ppm RMS
- ◆ Real time kinematic surveying
 - Single baseline < 30km
 - Horizontal: 8 mm + 1 ppm RMS
 - Vertical: 15m m + 1 ppm RMS
 - Network RTK
 - Horizontal: 8 mm + 0.5 ppm RMS
 - Vertical: 15m m + 0.5 ppm RMS
 - RTK start-up time: 2 to 8 seconds
- ◆ RTX service
 - Horizontal: 2-4cm RMS
 - Vertical: 5cm RMS
 - Convergence time: < 15min

HARDWARE

PHYSICAL

- ◆ Material: Magnesium alloy
- ◆ Dimensions (W×H): 130mm×110mm
- ◆ Weight: 1.0kg with internal battery
- ◆ Operating temperature: -40 °C to +60 °C
- ◆ Storage temperature: -55 °C to +85 °C
- ◆ Ingress protection: IP67 dustproof, protected from 30min immersion to depth of 1m
- ◆ Shock: Survive a 2m pole drop onto concrete
- ◆ Vibration: MIL-STD-810G

COMMUNICATIONS & DATA STORAGE

- ◆ I/O Interface
 - 1 LEMO port (5pin): Supports power input, serial port control, and external radio communication
 - 1 micro USB port: Data download, OTG
 - 1 sim card slot: Supports micro sim card
 - 1 antenna port: UHF antenna interface
- ◆ Radio modem
 - Transmit power: 1w/2w/5w switchable, the work range is greater than 6km
 - Frequency band: 410MHz-470MHz; supports to freely set the frequency
 - Supports to retransmit correction from CORS; Compatible with other brands
- ◆ Cellular
 - Integrated full frequency band 4G modem, supports WCDMA/CDMA2000/TDD-LTE /FDD-LTE
- ◆ WiFi
 - 802.11 b/g standard, access point and client mode, supports to access to hotspot to transfer corrections
- ◆ Bluetooth
 - Fully integrated Bluetooth V4.0, range = 50m
- ◆ Data format
 - sCMRx, RTCM3.2, CMR, RTCM 3.x input and output
 - Dat, Rinex, NMEA outputs
- ◆ Storage
 - 8GB, 16GB, 32GB internal memory optional, supports cyclic storage; over one-year raw observations based on 5 seconds interval

OTHERS

PRACTICAL

- ◆ OS system: Intelligent LINUX operating system
- ◆ Patented Offset Measurement Technology: Supports large-area offset correction measurements in concealed areas without any sensors (Intersection Angle > 30 degree; a ccuracy, < 2cm)
- ◆ Tilt survey: Calibration free; accuracy, <2.5cm in 30 degree
- ◆ Relay station: CORS relay, radio relay
- ◆ Supported controllers: All Android devices with supported software

DESIGN

- ◆ Display: 1.54'' high brightness LCD screen
- ◆ Button: 1 power key, 2 function keys
- ◆ Indicator: 1 power indicator, 1 data link indicator, 1 satellite indicator
- ◆ Voice: Intelligent voice prompts

