

# Travel Recorder™ ST

## Model: BL-1000ST

### Applications:

- Portable GNSS Travel Recorder to log your trip and point of interest
- Extended large memory capacity excellent for data collection
- Bluetooth 4.0 BLE wireless connection to iPhone / Android devices
- Long battery life and high sensitivity to suit diversified research
- GPS+GLONASS+QZSS engine and Acceleration sensor enabled for optimizing log



### Features:

- Adopt high sensitivity **GPS+GLONASS+QZSS** chipset
- Bluetooth interface to instantly add GPS to iPhone and Android devices\*
- AGPS and SBAS (WAAS, EGNOS, MSAS, GAGAN) support
- Flexible log mode and default set as log every 5 second
- Support Micro SD Card logging and no worry multiple-day track logs
- Removeable and rechargeable Li-Ion battery to ensure full track logs
- Ultra lower power consumption up to **25 hours** operation with Bluetooth connected
- 5 LEDs and Beeper integration to indicate device status
- Support **POI button** to memorize your point of interest immediately
- Integrate **Acceleration sensor** to smartly manage power saving and movement detection
- Micro USB port for Charging, data downloading and Firmware updating
- G-Mouse + Bluetooth in one: wired and wireless GPS receiver
- For Personal/Portable Navigation (Smartphone and PC, etc.)

\*Transmitting Qstarz specific protocol only

## Qstarz Travel Software Included

### QTravel™ PC Software- Your Best Travel Mate

- **Database structure** which can collect and manage all track data easily
- With built-in Google Map, Multi-language support, and Visualization UI
- Support GeoTagging function for digital photo and generate KMZ file easily
- Support Track Editing, Track split/merge, and Track Playback with photo/video
- Output your track records to GPX / PLT / CSV / NMEA / Google Earth file format.
- Support **Raw Data Manager** for selecting necessary GPS parameter to record, view, and output
- Support uploading geo-photo to Facebook/flickr community website directly
- Support GPS device configuration and AGPS download



## Download Qstarz APP from iOS or Android OS

**Qstarz GPS BLE GPS View APP (iOS & Android OS)**

- Show the GNSS status information (GPS/GLONASS)
- Show Satellite distribution and GNSS signal strength chart
- Support recording GNSS data after GNSS position fixed
- Save GPS records and export as CSV files
- Show the battery level of the device



Qstarz BLE GPS View



iOS version



Android version

**Specifications:**

Model	BL-1000ST
Product description	Bluetooth GPS Travel Recorder
Bluetooth	BLE Bluetooth 4.0
GNSS	GPS/GLONASS/QZSS
Frequency	GPS/QZSS: L1 1575.42MHz, C/A code GLONASS: L1 1598.0625~1603.375MHz, C/A code
Sensitivity	Tracking -165dBm
Update Rate	1Hz
Recording Rate	1Hz (default set as log every 5 second)
Acquisition Time	Cold/Warm/Hot Start : 35/34/1 sec. (without AGPS) Less than 15 sec. for cold start (with AGPS)
Position Accuracy	Autonomous: 3m (2D-RMS) SBAS: 2.5m(CEP)50 % (SBAS :WAAS, EGNOS, MSAS, GAGAN)
Datum	WGS-84
Attitude / Velocity	Max Attitude <18,000m Max Velocity <515m/sec, Velocity accuracy: 0.05m/s (with aid)
GPS Protocol	NMEA 0183 V4.10
Keys & LED	<ul style="list-style-type: none"><li>● 3 Function buttons: Power, POI, and Reset button</li><li>● 5 LED Indications (Charge, Memory, GPS, Bluetooth, and Alarm)</li></ul>
Memory Capacity	At least 8GB Micro SD Card
Battery	Removable and rechargeable lithium-ion
Battery life	Bluetooth connected:-25 hrs
Antenna	Built in GPS Antenna
Sensor	Yes (G-Sensor with $\pm 3G$ dynamic range)
Beeper	Yes
Input Power	DC 5V, 500mA
Interface	Micro USB port (for charging, data downloading and firmware update)
Firmware Upgradable	Yes (via USB charging port)
Environment temperature	Operating Temp: - 10 °C to + 60 °C Storage Temp: - 20 °C to + 60 °C Charging Temp: 0 °C to + 45 °C
Unit dimensions	81 x 48 x 19 mm
Weight	69 grams with battery (47 grams without battery)
Accessories	Rechargeable battery, USB Cable, Car Charger, User's Guide