Product Specifications

LoRaWAN™ Flexible Tracker

LT-501/ LT-501B/ LT-501R Series

VER: 0.9H

GlobalSat WorldCom Corporation
16F., No. 186, Jian 1st Rd, Zhonghe Dist.,
New Taipei City 23553, Taiwan
Tel: 886.2.8226.3799/ Fax: 886.2.8226.3899
lora@globalsat.com.tw
www.globalsat.com.tw

USGlobalSat Incorporated
14740 Yorba Court Chino, CA 91710
Tel: 888.323.8720 / Fax: 909.597.8532
sales@usglobalsat.com
www.usglobalsat.com

Introduction

LT-501 is a RF Network tracker specifically designed for both indoor and outdoor monitoring on objects. It is compact, light, and easy to use. The device is also equipped with the re-chargeable battery to provide basic power usage. The device allows monitoring center to remotely configure and track the device immediately or periodically by sending RF commands to the device. **Geo-fence configuration is also available to create permissible areas or restricted areas to provide more flexible monitoring options of the device.** (Geo-Fence needs to be done by Application Server, includes outdoor and indoor geo-fence)

Product Features

- Support LoRaWAN™ Class A/ Class C
- Outdoor / Indoor geo-location
- Long-distance transmission
- Regular/ Real-time tracking by remote configuration (Report interval, Enable/ Disable GPS, Buzzer, Ping)
- Built- in 3 axis accelerometer for motion detector
- Built in BLE for beacon (Indoor positioning)
- Configurable setting via BLE
- Support buzzer for alert
- Power Low/ Off alert
- Support Geo-fencing functions (need to be done by AS/ EzFinder side)
- Support help report
- Micro USB connector
- Built- in watchdog

DRAFT

H/W Specifications	
LoRa® Chipset	Semtech SX-1276
LoRa® Antenna	Internal LoRa® antenna
LoRa® Frequency	**LT-501H/ LT-501BH/ LT-501RH:** US 915 MHz/ AS 923 MHz **LT-501E/ LT-501BE/ LT-501RE:** EU 868 MHz
MCU	STM32 Cortex M0+
BLE	Nordic BLE for slave mode
BLE Antenna	Internal BLE antenna
GPS	MTK MT-3333
GPS Antenna Type	Patch antenna (size: 18 × 18 × 2 mm) / MMCX Connector (External)
Button	Power button x 1 (Power/ Reset in one button) Function button x 1 (Help report)
Sensor	3-Axis accelerometer
Sound Effect	Buzzer (Film, 68 ±3 dB @ 1M)
LED Indicator	LED X 4 : ● Power LED : Red & Green LED Low battery ➔ Red Charging ➔ Green (blink) Charging full ➔ Green (always on) ● GPS LED : Green ● LoRa® LED (Transmitting) : Yellow ● BLE LED (Transmitting) : Blue
I/O	Micro USB with rubber cover for charging (5V/0.5A)
Operation Voltage	DC 3.3 ~ 4.3V USB 4.5 ~ 5.5V
Transmission Distance	LoRa® : 1 ~10 KM @ 980 bps BLE (Open sides): 35 M
Receiving Sensitivity	-128dBm @ 980bps (typical, TBC)
Battery	**LT-501 Series:** Re-chargeable Li-polymer battery 500mAh **LT-501B Series:** Re-chargeable Li-polymer battery (>1500mAh, TBD) **LT-501R Series:** Replaceable battery 19A with USB connector
Battery life (Reference only)	(5mins GPS report interval, TBC) **LT-501 Standard Series:** Less than 1 week operation **LT-501B Series:** TBD **LT-501R Series:** 3 months operation

DRAFT

H/W Specifications	
Operating Temperature	With Battery: Charge: 0 ~ 45 ℃ Operation: -20 ~ 60 ℃ Storage: -20 ~ 80 ℃
Humidity	5 ~ 95% (Non-condensing)
Adaptor Type	USB A type
Dimension	**LT-501 Standard Series:** 63 × 42.8 × 15 ± 0.15 mm **LT-501B Series:** TBC **LT-501R Series:** 84 × 69.6 × 52.8 ± 0.15 mm
Weight	**LT-501 Standard Series:** 35 ± 2 g **LT-501B Series:** TBC **LT-501R Series:** 98 ± 5 g (without battery); 200 ± 10 g (with battery)
Accessories	Standard Micro USB Cable LT-501 Standard Series Micro USB Cable Holder LT-501R Series19A Battery (Optional) External GPS Antenna (Optional)
Certification	CE, FCC, TELEC
Waterproof	IPX7 Protected with rubber cover sealed

Product SKU

	SKU	LT-501 Standard Series		LT-501B Series		LT-501R Series	
	Model Name	LT-501H	LT-501E	LT-501BH	LT-501BE	LT-501RH	LT-501RE
Battery Type	Rechargeable Battery (500mA)	✓	✓				
	Rechargeable Battery (>1500mA, TBD)			✓	✓		
	Replaceable Battery (19A)					✓	✓
Frequency	US 915/ AS 923 MHz	✓		✓		✓	
	EU 868 MHz		✓		✓		✓
Dimension		63 × 42.8 × 15 mm		TBD		84 × 69.6 × 52.8 mm	

DRAFT

LT-501 Standard Series

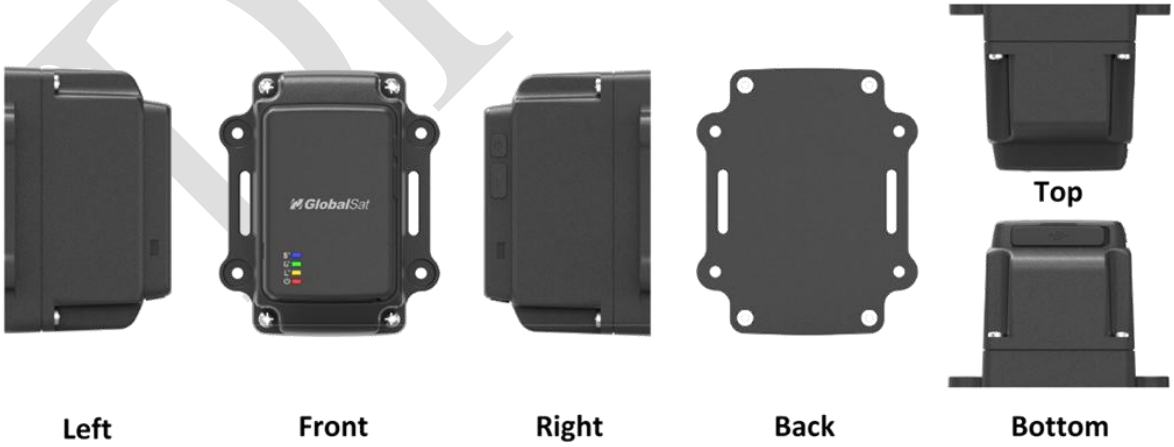
63 × 42.8 × 15 ± 0.15 mm

LT-501B Series

TBD

LT-501R Series

84 × 69.6 × 52.8 ± 0.15 mm



DRAFT

Accessory

LT-501 Standard Series Micro USB Cable Holder

Front

Bottom

Back

Front

Left

Back

Bottom

L*W*H=47.3*34.3*17.5mm