TOPFLY Bech

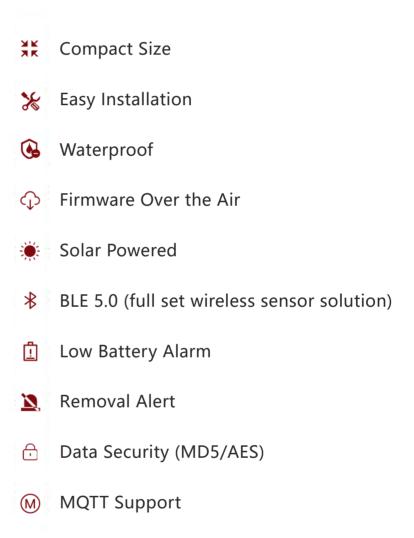
PROFESSIONAL SOLAR POWERED ASSET TRACKER

TLP2-SFB is a professional solar powered asset tracker with high grade solar panel for wide ranging applications

LTE & GSM TLP2-SFB

LTE Cat-M1 (eMTC)/Cat-NB1 (NB-IoT) and GSM assets tracking devices for wide ranging applications





Certificates:



*Please reach out to us if you need any certificates in particular

Standby Time

(Without solar charging, 2 hours active tracking per day)



Trailer Tracking



Container Tracking



Freight Transport



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in TOPFLYtech

LTE TLP2-SFB SPEC

EGP38.82.04007.8007.9007.1/2 Pata Transmission eMTC: Max. 300.Khps (DL), Max. 275 dps (UL) SNS Chipset Qualcomm Gen 3C Ottoss (UL) SNS Chipset Qualcomm Gen 3C GMSS receiver Parallel CMSS GP3+C Draws. 404.Ren Bedidu Receiver Type 33 tracking/09 acquisitors: channel GMSS receiver Parallel CMSS GP3+C Draws. 404.Ren Bedidu Receiver Type 33 tracking/09 acquisitors: channel GMSS receiver Parallel CMSS GP3+C Draws. 404.Ren Bedidu Receiver Type 33 tracking/09 acquisitors: channel GMSS receiver Position Accuracy (CEP) Autoromous < 2m Cold Start x 23 Warm start < 475 Itterfaces Cold Start x 23 Unstrained Data Transmission 4 Prinoort with magnet Verwork, GNS Antenna Interna or y Indicator LED Network, GNS and Battery level OTA Weight Start So 20 Veight Start So 20 Start So 20 Start So 20 Start So 20 <th>Network/Operating Band</th> <th></th>	Network/Operating Band	
Data Transmission NBE Nos. 32Kbps (Db), Max. 73 obes (Ub) CGG Max. 29Kbps (Cb), Max. 253 obes (Ub) GPR3s Max. 107Kbps (Db), Max. 65 obes (Ub) Receiver Type GRSS Chipset Quatomm Gen RC CNSS raceiver GPR4 Obes (Db), Max. 65 obes (Db) Receiver Type Sensitivity Cold start - 40 dBm Tracking, - 65 dBm Position Accuracy (CEP) Automatus: 4-2m National Data Transmission All for the 285 Weim start: 4.27 Hist start: 4.28 Hist start: 4.28 Hist start: 4.28 Hist start: 4.28 Hist start: 4.28 Hist start: 4.28 Hist start: 4.27 Hist start: 4.18 Interfaces	Operating Band	TDD: B39 (Cat M1 only)
GNSS Chipset Quatcomm Gen BC GNSS receiver Parallel GNSS CP5+ Clorues + Gellies Bedou Receiver Type 33 tracking/99 acquisitions - channel GNSS receiver Sensitivity Cold start + 49 dam Tracking: +163 dBm Position Accuracy (CEP) Autonomouls < 2m	Data Transmission	NB1: Max. 32Kbps (DL), Max. 70Kbps (UL) EDGE: Max. 296Kbps (DL), Max. 236.8Kbps (UL)
Parallel GNSS GPS + Geness + Galleo + Beldou Receiver Type 33 tracking/99 acquisitors- channel GNSS receiver Sensitivity Cole start - 149 dBm Tracking - 163 dBm Position Accuracy (CEP) Autonomous < 2m	GNSS Specifications	
Receiver Type 32 tracking/99 acquisitionschannel GNIS neceiver Sensitivity Tracking, 163 dbm Position Accuracy (CEP) Autonomous < 2m	GNSS Chipset	Qualcomm Gen 8C GNSS receiver
Cold start: -149 dBm Tracking: -153 dBm Position Accuracy (CEP) Autonomous < 2m	Parallel GNSS	GPS+Glonass +Galileo+ Beidou
Sensitivity Tacking: -163 dBm Position Accuracy (CEP) Autonomous < 2m	Receiver Type	33 tracking/99 acquisitions- channel GNSS receiver
Standalone TTFF Cold start: < 29s Warm start. < 27s Hot start. < 1s	Sensitivity	
Standalone TTFF Warm start. < 27s Hot start. < 1s	Position Accuracy (CEP)	Autonomous < 2m
Charging and Data Transmission 4. Pin port with magnet Network, GNSS Antenna Internal only Indicator LED Network, GNSS and Battery level FOTA Yes Physical Power Switch 1 Light Sensor 1 back light sensor Temperature Sensor 1 temperature sensor BLE 5.0 Yes General Specifications Waterproof Waterproof IP67 Dimensions 85mm* 185mm*31 mm (3.55* *7.28* * 1.22*) Weight 370g (3.05o2) Battery Rechargeable Li 9600 mAh/ 3.6V Standby Time (Without considering solar charging, 2 hours active tracking per day) 1 minutes reporting: 320 Days Strinutes reporting: 170 Days 5 minutes reporting: 170 Days 1 minute reporting: 68 Days 5 minutes reporting: 68 Days Charging & Data Communication Magnetic USB cable (Recommend using SV 1A daaptor, 20 hours charging) Solar Panel For charging the tracker battery Operating Temperature -25*C ~+80*C (-13*F = 176*F) Mounting Magnet/Screw Air Interface Protocol TCE UDP MQTT, SMS Data Security & Encryption Option MDS/AES128 <	Standalone TTFF	Warm start: < 27s
Network, GNSS Antenna Internal only Indicator LED Network, GNSS and Battery level FOTA Yes Physical Power Switch 1 Light Sensor 1 back light sensor Temperature Sensor 1 temperature sensor BLE 5.0 Ves General Specifications	Interfaces	
Indicator LED Network, GNSS and Battery level FOTA Yes Physical Power Switch 1 Light Sensor 1 back light sensor Temperature Sensor 1 temperature sensor BLE 5.0 Yes General Specifications Waterproof Waterproof IP67 Dimensions 85mm* 185mm*31 mm (3.35**7.28**1.22*) Weight 370g (13.05oz) Battery Rechargeable Li 9600 mAh/ 3.6V Standby Time 10 minutes reporting: 320 Days Stindut considering solar charging, 10 minutes reporting: 6B Days Charging & Data Communication Magnetic USB cable (Recommend using 5V 1A adaptor, 20 hours charging) Solar Panel For charging the tracker battery Operating Temperature -25°C ~+80°C (-13°F = 176°F) Mounting Magnet/Screw Air Interface Protocol TCR UDP MQTT, SMS Data Security & Encryption Option MD5/AES128 BLE Accessory Support Yes Scheduled Timing/angle/distance Report Report position and status at preset intervals Geo-fence Support up to 64 internal geo-fence regions Low Power Alarm Se	Charging and Data Transmission	4 Pin port with magnet
FOTA Yes Physical Power Switch 1 Light Sensor 1 back light sensor Temperature Sensor 1 temperature sensor BLE 5.0 Yes General Specifications Waterproof Waterproof IP67 Dimensions 85mm* 185mm*31 mm (3.35" *7.28" * 1.22") Weight 370g (13.05oz) Battery Rechargeable Li 9600 m/h/ 3.6V Standby Time (Without considering solar charging, 2 hours active tracking per day) 10 minutes reporting: 320 Days 5 minutes reporting: 170 Days 1 minute reporting: 68 Days Charging & Data Communication Magnetic USB cable (Recommend using SV 1A adaptor, 20 hours charging) Solar Panel For charging the tracker battery Operating Temperature -25°C + 480°C (-(13"F - 176"F) Mounting Magnet/Screw Air Interface Protocol TCP, UDP, MQTT, SMS Data Security & Encryption Option MDS/AES128 BLE Accessory Support Yes Scheduled Timing/angle/distance Report Report position and status at preset intervals Geo-fence Support up to 64 internal geo-fence regions Low Power Alarm Sending alarm when battery is low Motion De	Network, GNSS Antenna	Internal only
Physical Power Switch 1 Light Sensor 1 back light sensor Temperature Sensor 1 temperature sensor BLE 5.0 Yes General Specifications Waterproof Waterproof IP67 Dimensions 85mm* 185mm*31 mm (3.35* *7.28* * 1.22") Weight 370g (13.05oz) Battery Rechargeable Li 9600 mAh/ 3.6V Standby Time 10 minutes reporting: 320 Days Without considering solar charging, 2 hours active tracking per day) 10 minutes reporting: 10 Days Charging & Data Communication Magnetic USB cable (Recommend using 5V 1A adaptor, 20 hours charging) Solar Panel For charging the tracker battery Operating Temperature -25*C + 480*C (-13*F - 176*F) Mounting Magnet/Screw Air Interface Protocol TCP: UDP, MQTT, SMS Data Security & Encryption Option MD5/AES128 BLE Accessory Support Yes Scheduled Timing/angle/distance Report Report position and status at preset intervals Geo-fence Support up to 64 internal geo-fence regions Low Power Alarm Sending alarm when battery is low Motion alarm based on internal 3-axis accelerome	Indicator LED	Network, GNSS and Battery level
Light Sensor1 back light sensorTemperature Sensor1 temperature sensorBLE 5.0YesGeneral Specifications1P67Waterproof1P67Dimensions85mm* 185mm*31 mm (3.35' *7.28' * 1.22')Weight370g (13.05o2)BatteryRechargeable Li 9600 mAh/ 3.6VStandby Time (Without considering solar charging, 2 hours active tracking per day)10 minutes reporting: 320 Days 5 minutes reporting: 170 Days 5 minutes reporting: 68 DaysCharging & Data CommunicationMagnetic US8 cable (Recommend using 5V 1A adaptor, 20 hours charging)Solar PanelFor charging the tracker batteryOperating Temperature Austrice-25°C - 480°C (-13°F - 176°F)MountingMagnet/ScrewAtt Interface ProtocolTCP, UDP, MQTT, SMSData Security & Encryption OptionMD5/AES128BLE Accessory SupportYesScheduled Timing/angle/distance ReportReport position and status at preset intervalsGeo-fence Low Power AlarmSupport up to 64 internal geo-fence regionsMotion DetectionMotion alarm based on internal 3-axis accelerometer	FOTA	Yes
Light ContorTemperature sensorBLE 5.0YesGeneral SpecificationsWaterproofIP67Dimensions85mm* 185mm*31 mm (3.35" *7.28" * 1.22")Weight370g (13.05oz)BatteryRechargeable Li 9600 mAh/ 3.6VStandby Time (Without considering solar charging, 2 hours active tracking per day)10 minutes reporting: 320 Days 5 minutes reporting: 170 Days 1 minute reporting: 68 DaysCharging & Data CommunicationMagnetic USB cable (Recommend using 5V 1A adaptor, 20 hours charging)Solar PanelFor charging the tracker batteryOperating Temperature-25°C ~+80°C (-13°F - 176°F)MountingMagnet/ScrewAir Interface ProtocolTCR UDP, MQTT, SMSData Security & Encryption OptionMDS/AES128BLE Accessory SupportYesScheduled Timing/angle/distance ReportReport position and status at preset intervals Sending alarm when battery is lowMotion DetectionMotion alarm based on internal 3-axis accelerometer	Physical Power Switch	1
Standported: Yes General Specifications IP67 Waterproof IP67 Dimensions 85mm* 185mm*31 mm (3.35" *7.28" * 1.22") Weight 370g (13.05oz) Battery Rechargeable Li 9600 mAh/ 3.6V Standby Time (Without considering solar charging, 2 hours active tracking per day) 10 minutes reporting: 320 Days 5 minutes reporting: 170 Days 1 minutes reporting: 68 Days Charging & Data Communication Magnetic USB cable (Recommend using 5V 1A adaptor, 20 hours charging) Solar Panel For charging the tracker battery Operating Temperature -25°C ~ +80°C (-13°F – 176°F) Mounting Magnet/Screw Air Interface Protocol TCP, UDP, MQTT, SMS Data Security & Encryption Option MD5/AES128 BLE Accessory Support Yes Scheduled Timing/angle/distance Report Report position and status at preset intervals Geo-fence Support up to 64 internal geo-fence regions Low Power Alarm Sending alarm when battery is low Motion alarm based on internal 3-axis accelerometer Paroti na status at preset intervals	Light Sensor	1 back light sensor
General Specifications Waterproof IP67 Dimensions 85mm* 185mm*31 mm (3.35" *7.28" * 1.22") Weight 370g (13.05oz) Battery Rechargeable Li 9600 mAh/ 3.6V Standby Time 10 minutes reporting: 320 Days Standby Time (Without considering solar charging, 2 hours active tracking per day) 10 minutes reporting: 170 Days Charging & Data Communication Magnetic USB cable (Recommend using 5V 1A adaptor, 20 hours charging) Solar Panel For charging the tracker battery Operating Temperature -25°C ~+80°C (-13°F – 176°F) Mounting Magnet/Screw Air Interface Protocol TCR UDP MQTT, SMS Data Security & Encryption Option MD5/AES128 BLE Accessory Support Yes Scheduled Timing/angle/distance Report Report position and status at preset intervals Geo-fence Support up to 64 internal geo-fence regions Low Power Alarm Sending alarm when battery is low Motion alarm based on internal 3-axis accelerometer Panding alarm when battery is low	Temperature Sensor	1 temperature sensor
WaterproofIP67Dimensions85mm* 185mm*31 mm (3.35" *7.28" * 1.22")Weight370g (13.05oz)BatteryRechargeable Li 9600 mAh/ 3.6VStandby Time (Without considering solar charging, 2 hours active tracking per day)10 minutes reporting: 320 Days 5 minutes reporting: 170 Days 1 minutes reporting: 68 DaysCharging & Data CommunicationMagnetic USB cable (Recommend using 5V 1A adaptor, 20 hours charging)Solar PanelFor charging the tracker batteryOperating Temperature-25°C ~+80°C (-13°F - 176°F)MountingMagnet/ScrewAir Interface ProtocolTCP, UDP, MQTT, SMSData Security & Encryption OptionMD5/AES128BLE Accessory SupportYesScheduled Timing/angle/distance ReportReport position and status at preset intervalsGeo-fenceSupport up to 64 internal geo-fence regionsLow Power AlarmSending alarm when battery is lowMotion DetectionMotion alarm based on internal 3-axis accelerometer	BLE 5.0	Yes
Dimensions85mm* 185mm*31 mm (3.35" *7.28" * 1.22")Weight370g (13.05oz)BatteryRechargeable Li 9600 mAh/ 3.6VStandby Time (Without considering solar charging, 2 hours active tracking per day)10 minutes reporting: 320 Days 5 minutes reporting: 170 Days 1 minute reporting: 68 DaysCharging & Data CommunicationMagnetic USB cable (Recommend using 5V 1A adaptor, 20 hours charging)Solar PanelFor charging the tracker batteryOperating Temperature-25°C ~+80°C (-13°F - 176°F)MountingMagnet/ScrewAir Interface ProtocolTCP, UDP, MQTT, SMSData Security & Encryption OptionMD5/AES128BLE Accessory SupportYesScheduled Timing/angle/distance ReportReport position and status at preset intervalsGeo-fenceSupport up to 64 internal geo-fence regionsLow Power AlarmSending alarm when battery is lowMotion DetectionMotion alarm based on internal 3-axis accelerometer	General Specifications	
Weight370g (13.05oz)BatteryRechargeable Li 9600 mAh/ 3.6VStandby Time (Without considering solar charging, 2 hours active tracking per day)10 minutes reporting: 320 Days 5 minutes reporting: 170 Days 1 minute reporting: 68 DaysCharging & Data CommunicationMagnetic USB cable (Recommend using 5V 1A adaptor, 20 hours charging)Solar PanelFor charging the tracker batteryOperating Temperature-25°C ~+80°C (-13°F - 176°F)MountingMagnet/ScrewAir Interface ProtocolTCP, UDP, MQTT, SMSData Security & Encryption OptionMD5/AES128BLE Accessory SupportYesScheduled Timing/angle/distance ReportReport position and status at preset intervalsGeo-fenceSupport up to 64 internal geo-fence regionsLow Power AlarmSending alarm when battery is lowMotion DetectionMotion alarm based on internal 3-axis accelerometer	Waterproof	IP67
BatteryRechargeable Li 9600 mAh/ 3.6VStandby Time (Without considering solar charging, 2 hours active tracking per day)10 minutes reporting: 320 Days 5 minutes reporting: 170 Days 1 minute reporting: 68 DaysCharging & Data CommunicationMagnetic USB cable (Recommend using 5V 1A adaptor, 20 hours charging)Solar PanelFor charging the tracker batteryOperating Temperature-25°C ~+80°C (-13°F - 176°F)MountingMagnet/ScrewAir Interface ProtocolTCP, UDP, MQTT, SMSData Security & Encryption OptionMD5/AES128BLE Accessory SupportYesScheduled Timing/angle/distance ReportReport position and status at preset intervalsGeo-fenceSupport up to 64 internal geo-fence regionsLow Power AlarmSending alarm when battery is lowMotion DetectionMotion alarm based on internal 3-axis accelerometer	Dimensions	85mm* 185mm*31 mm (3.35" *7.28" * 1.22")
Standby Time (Without considering solar charging, 2 hours active tracking per day)10 minutes reporting: 320 Days 5 minutes reporting: 170 Days 1 minute reporting: 68 DaysCharging & Data CommunicationMagnetic USB cable (Recommend using 5V 1A adaptor, 20 hours charging)Solar PanelFor charging the tracker batteryOperating Temperature-25°C ~+80°C (-13°F – 176°F)MountingMagnet/ScrewAir Interface ProtocolTCP, UDP, MQTT, SMSData Security & Encryption OptionMD5/AES128BLE Accessory SupportYesScheduled Timing/angle/distance ReportReport position and status at preset intervalsGeo-fenceSupport up to 64 internal geo-fence regionsLow Power AlarmSending alarm when battery is lowMotion DetectionMotion alarm based on internal 3-axis accelerometer	Weight	370g (13.05oz)
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Charging & Data Communication(Recommend using 5V 1A adaptor, 20 hours charging)Solar PanelFor charging the tracker batteryOperating Temperature-25°C ~+80°C (-13°F – 176°F)MountingMagnet/ScrewAir Interface ProtocolTCP, UDP, MQTT, SMSData Security & Encryption OptionMD5/AES128BLE Accessory SupportYesScheduled Timing/angle/distance ReportReport position and status at preset intervalsGeo-fenceSupport up to 64 internal geo-fence regionsLow Power AlarmSending alarm when battery is lowMotion DetectionMotion alarm based on internal 3-axis accelerometer	(Without considering solar charging,	5 minutes reporting: 170 Days
Operating Temperature-25°C ~+80°C (-13°F – 176°F)MountingMagnet/ScrewAir Interface ProtocolTCP, UDP, MQTT, SMSData Security & Encryption OptionMD5/AES128BLE Accessory SupportYesScheduled Timing/angle/distance ReportReport position and status at preset intervalsGeo-fenceSupport up to 64 internal geo-fence regionsLow Power AlarmSending alarm when battery is lowMotion DetectionMotion alarm based on internal 3-axis accelerometer	Charging & Data Communication	
MountingMagnet/ScrewAir Interface ProtocolTCP, UDP, MQTT, SMSTransmit ProtocolTCP, UDP, MQTT, SMSData Security & Encryption OptionMD5/AES128BLE Accessory SupportYesScheduled Timing/angle/distance ReportReport position and status at preset intervalsGeo-fenceSupport up to 64 internal geo-fence regionsLow Power AlarmSending alarm when battery is lowMotion DetectionMotion alarm based on internal 3-axis accelerometer	Solar Panel	For charging the tracker battery
Air Interface Protocol Transmit Protocol TCP, UDP, MQTT, SMS Data Security & Encryption Option MD5/AES128 BLE Accessory Support Yes Scheduled Timing/angle/distance Report Report position and status at preset intervals Geo-fence Support up to 64 internal geo-fence regions Low Power Alarm Sending alarm when battery is low Motion Detection Motion alarm based on internal 3-axis accelerometer	Operating Temperature	-25°C ~+80°C (-13°F - 176°F)
Transmit ProtocolTCP, UDP, MQTT, SMSData Security & Encryption OptionMD5/AES128BLE Accessory SupportYesScheduled Timing/angle/distance ReportReport position and status at preset intervalsGeo-fenceSupport up to 64 internal geo-fence regionsLow Power AlarmSending alarm when battery is lowMotion DetectionMotion alarm based on internal 3-axis accelerometer	Mounting	Magnet/Screw
Data Security & Encryption OptionMD5/AES128BLE Accessory SupportYesScheduled Timing/angle/distance ReportReport position and status at preset intervalsGeo-fenceSupport up to 64 internal geo-fence regionsLow Power AlarmSending alarm when battery is lowMotion DetectionMotion alarm based on internal 3-axis accelerometer	Air Interface Protocol	
BLE Accessory SupportYesScheduled Timing/angle/distance ReportReport position and status at preset intervalsGeo-fenceSupport up to 64 internal geo-fence regionsLow Power AlarmSending alarm when battery is lowMotion DetectionMotion alarm based on internal 3-axis accelerometer	Transmit Protocol	TCP, UDP, MQTT, SMS
Scheduled Timing/angle/distance ReportReport position and status at preset intervalsGeo-fenceSupport up to 64 internal geo-fence regionsLow Power AlarmSending alarm when battery is lowMotion DetectionMotion alarm based on internal 3-axis accelerometer	Data Security & Encryption Option	MD5/AES128
Geo-fence Support up to 64 internal geo-fence regions Low Power Alarm Sending alarm when battery is low Motion Detection Motion alarm based on internal 3-axis accelerometer	BLE Accessory Support	Yes
Low Power Alarm Sending alarm when battery is low Motion Detection Motion alarm based on internal 3-axis accelerometer	Scheduled Timing/angle/distance Report	Report position and status at preset intervals
Motion Detection Motion alarm based on internal 3-axis accelerometer	Geo-fence	Support up to 64 internal geo-fence regions
	Low Power Alarm	Sending alarm when battery is low
Removal Alarm Sending alarm when the light sensor detecting the light changing		Motion alarm based on internal 3-axis accelerometer
	Removal Alarm	Sending alarm when the light sensor detecting the light changing