TFT100
ELECTRIC SCOOTER TRACKER^{PLUS}

Reduce carbon emissions, reduce traffic congestion and increase convenience and ease of travelling from point A to B. You can achieve all of this with a single Electric Scooter Tracker, which is designed to provide you the most out of sharing operations. The device has internal high gain GNSS/GSM antennas, Bluetooth and high-capacity internal Li-ion battery and 10-97 V power supply range for integration variety. The communication and data collection from e-scooter ECU allows you to manage your fleet professionally without any difficulties. The device can be used not only for sharing, but also for food delivery applications, anti-theft, predictive maintenance.

DIFFERENT INERFACES

CAN, RS232, RS485, UART interface support depending on chosen modification

E-SCOOTER SUPPORT

Various e-scooter models support (Askoll, Govecs, Nuuk, ..)

INGRESS PROTECTION

Water and dust resistant for outdoor integrations (IP67)

OTA UPDATES

Convenient OTA (over-the-air) updating through user-friendly applications

POWER SUPPLY

Wide power supply voltage range for integration variety (10-97V)

CONFIGURABLE I/O

Configurable analog and digital inputs and outputs

E-SCOOTER SHARING PLATFORMS

FOOD DELIVERY PLATFORMS

POST DELIVERY PLATFORMS

PREDICTIVE MAINTENANCE

ANTI-THEFT

Hardware

Module name	TM2500
Technology	GSM/GPRS/GNSS/Bluetooth (4.0 + LE)
GNSS	GPS, GLONASS, GALILEO, BEIDOU, SBAS, QZSS, DGPS, AGPS
Receiver	33 channel
Tracking sensitivity	-165 dBm
Accuracy	< 3 m
GNSS receiver start times	Hot < 1 s, Warm < 25 s, Cold < 35 s
Cellular technology	GSM
2G bands	Quad-band GSM 850 / 900 / 1800 / 1900 MHz, GPRS Multi-Slot Class 12 (up to 440 kbps) GPRS Mobile Station Class B
Data support	SMS (text/data)
Power supply	10-97 V DC
Internal batteries	1800 mAh Li-Ion battery 3.7 V (6.66 Wh) internal back-up battery

Interface

Modifications	**CAN modification** - 1x CAN-BUS (CAN H - CAN L), 1x AIN1/DIN1, 1x AIN2/DIN2, 1x DOUT1/DIN3,1x DOUT2/DIN4, 1x 1-Wire, micro-USB, 2 x status LED lights **RS485 modification** - 1x RS485 (RS485-A - RS485-B), 1x AIN1/DIN1, 1x AIN2/DIN2, 1x DOUT1/DIN3,1x DOUT2/DIN4, 1x 1-Wire, micro-USB, 2 x status LED lights **RS232 modification** - 1x RS232 (RS232-IN - RS232-OUT), 1x AIN1/DIN1, 1x AIN2/DIN2, 1x DOUT1/DIN3,1x DOUT2/DIN4, 1x 1-Wire, micro-USB, 2 x status LED lights **UART modification** - 1x UART (UART-RX - UART-TX), 1x AIN1/DIN1, 1x AIN2/DIN2, 1x DOUT1/DIN3,1x DOUT2/DIN4, 1x 1-Wire, micro-USB, 2 x status LED lights
GNSS antenna	Internal High Gain
GSM antenna	Internal High Gain
Sensors	Accelerometer
Interface	2.0 Micro-USB, Micro-SIM with eSIM possibility, 128 MB internal flash memory (220'000 records)

Software

Configuration and firmware update	FOTA WEB (cloud based solution), Teltonika Configurator (USB, Bluetooth)
Scenarios	Eco/Green Driving, Over Speeding, Jamming, Excessive Idling, FallDown, Towing detection, Crash detection, Auto Geofence, Manual Geofence, Trip, Immobilizer, iButton, DOUT control via call, DOUT control via Ignition
Sleep modes	GPS Sleep, Online Deep Sleep, Deep Sleep, Ultra Deep Sleep
Protocols	UDP/TCP/SMS / NMEA*
Data sending	Main, Duplicate and Backup servers
Security	Configuration password, SMS login and password, Authorized GSM numbers list
Time Synchronization	GNSS, NITZ, NTP
Supported peripherals	Temperature and humidity sensor, Universal BLE sensors support

Physical specifications

Dimensions	72,5 x 73 x 27,3 mm (L x W x H)
Ingress Protection Rating	IP67

Certification & approvals

Regulatory	CE(RED), EAC, RoHS, REACH, E-Mark, IP67

* National Marine Electronics Association protocol available under separate request.