

TFT100 | RS232/ RS485



EASILY ADAPTABLE HIGH-VOLTAGE E-MOBILITY &
HEAVY MACHINERY GPS TRACKER



DIFFERENT INTERFACES

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

POWER SUPPLY

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

INGRESS PROTECTION

Water and dust resistant for outdoor integrations (IP67)

CONFIGURABLE I/O

Configurable analog inputs (2), digital inputs (4) and digital outputs (2)

1-WIRE DATA & POWER

Sensors (temperature, humidity, etc.) & authorization devices (RFID readers, iButton, etc.) connection



E-SCOOTERS



E-FORKLIFTS



E-MOPEDS



E-MOTORBIKE



E-TRUCK

Connect wireless Bluetooth® + LE-based external devices, like Low Energy beacons and sensors, to monitor temperature, humidity, magnet detection, and movement, increasing your management application's added value.

Monitor special types of machinery like electric forklifts, telehandlers, loaders, scissor lifts, golf carts, farm buggies, electric boats, and even coffee machines.

Reduce or even eliminate costs caused by accidents, downtime, or theft, and improve your business efficiency and operational safety.



Product

Model name	TFT100-TAIBB*	TFT100-TAIBC**
*RS485 interface **RS232 interface		

Module

Name	Teltonika TM2500	Teltonika TM2500
Technology	2G(GSM/GPRS)/GNSS/BLUETOOTH® LE	2G(GSM/GPRS)/GNSS/BLUETOOTH® LE

GNSS

GNSS	Teltonika TM2500	Teltonika TM2500
Receiver	L1: GPS, GLONASS, GALILEO, BEIDOU, SBAS*, QZSS*, DGPS*, AGPS*	L1: GPS, GLONASS, GALILEO, BEIDOU, SBAS*, QZSS*, DGPS*, AGPS*
Tracking sensitivity	33 tracking channel 99 acquisition channel	33 tracking channel 99 acquisition channel
Position accuracy	-165 dBm	-165 dBm
Velocity accuracy	< 0.1 m/s (within +/- 15% error)	< 0.1 m/s (within +/- 15% error)
Hot start	< 1 S	< 1 s
Warm start	< 25 S	< 25 s
Cold start	< 35 s	< 35 s

*Optional GNSS modes available with custom firmware development, for more information contact your sales manager.

Cellular

Technology	GSM/GPRS	GSM/GPRS
2G	GSM: B2/B3/B5/B8	GSM: B2/B3/B5/B8
GPRS	GPRS Mobile Station Class B	GPRS Mobile Station Class B
Data transfer	GSM (GPRS): Max. 85.6 Kbps (DL) / Max. 85.6 Kbps (UL)	GSM (GPRS): Max. 85.6 Kbps (DL) / Max. 85.6 Kbps (UL)
Data support	SMS (TEXT, PDU), Network protocols (TCP,UDP,TLS,DTLS)	SMS (TEXT, PDU), Network protocols (TCP,UDP,TLS,DTLS)

Power

Input voltage range	10 - 97 V DC with overvoltage protection	10 - 97 V DC with overvoltage protection
Back-up battery	1800 mAh Li-Ion battery 3.7 V (6.66 Wh)	1800 mAh Li-Ion battery 3.7 V (6.66 Wh)
Internal fuse	3.15 A, 125 V	3.15 A, 125 V

BLUETOOTH® technology

Specification	4.0 + LE
Supported peripherals	Temperature and Humidity sensor, Universal Bluetooth® LE sensors support

Power consumption

At 12V (Ultra Deep Sleep)	< 8 mA	< 8 mA
At 12V (Deep Sleep)	< 12 mA	< 12 mA
At 12V (Online Deep Sleep)	< 12 mA	< 12 mA
At 12V (GPS Sleep)	< 19.5 mA	< 19.5 mA
At 12V (Nominal with no load)	< 34 mA	< 34 mA
At 12V (With full load/peak)	< 2 A Max	< 2 A Max

Physical specification

Dimensions	72.5 x 73 x 27.3 mm (L x W x H)	72.5 x 73 x 27.3 mm (L x W x H)
Weight	169 g	169 g

Operating environment

Operating temperature (without battery)	-20 °C to +75 °C	-20 °C to +75 °C
Storage temperature (without battery)	-20 °C to +75 °C	-20 °C to +75 °C
Operating temperature (with battery)	-20 °C to +60 °C	-20 °C to +60 °C
Storage temperature (with battery)	-20 °C to +45 °C	-20 °C to +45 °C
Operating humidity	5% to 95% non-condensing	5% to 95% non-condensing
Ingress protection Rating	IP67	IP67
Battery charge temperature	0 °C to +45 °C	0 °C to +45 °C
Battery discharge temperature	-20 °C to +70 °C	-20 °C to +70 °C
Battery storage temperature	-10 °C to +45 °C	-10 °C to +45 °C

Interface

Digital input	4	4
Digital output	2	2
Analog input	2	2
1-Wire Data	1	1
1-Wire Power	1	1
RS485	1	-
RS232	-	1
GNSS antenna	Internal High Gain	Internal High Gain
Cellular antenna	Internal High Gain	Internal High Gain
USB	2.0 Micro-USB	2.0 Micro-USB
LED indication	2 status LED lights	2 status LED lights
SIM	Micro-SIM, eSIM*	Micro-SIM, eSIM*
Memory	128MB internal flash memory	128MB internal flash memory

*eSIM is available with separate PCB assembly, for more information contact your sales manager

Features

Sensors	Accelerometer	Accelerometer
Scenarios	Eco/Green Driving, Over Speeding, Jamming, Excessive Idling, FallDown, Towing detection, Crash detection, Auto Geofence, Manual Geofence, Trip/Odometer, Immobilizer, iButton, DOUT control via call, DOUT control via Ignition, Last Known Position, Timestamp Backup, Ignition ON Counter	Eco/Green Driving, Over Speeding, Jamming, Excessive Idling, FallDown, Towing detection, Crash detection, Auto Geofence, Manual Geofence, Trip/Odometer, Immobilizer, iButton, DOUT control via call, DOUT control via Ignition, Last Known Position, Timestamp Backup, Ignition ON Counter
RS485 Modes	Log Mode, NMEA, TCP Ascii, TCP Binary, Super Soco	-
RS232 Modes	-	Log Mode, NMEA, TCP Ascii, TCP Binary
Sleep Modes	GPS Sleep, Online Deep Sleep, Deep Sleep, Ultra Deep Sleep	GPS Sleep, Online Deep Sleep, Deep Sleep, Ultra Deep Sleep
Configuration and firmware update	FOTA Web, Teltonika Configurator (USB, Bluetooth® wireless technology)	FOTA Web, Teltonika Configurator (USB, Bluetooth® wireless technology)
SMS	Configuration, Events, Debug	Configuration, Events, Debug
GPRS commands	Configuration, Debug	Configuration, Debug
Time Synchronization	GNSS, NITZ, NTP	GNSS, NITZ, NTP
Ignition detection	Accelerometer, External Power Voltage, DIN1, DIN3, DIN4	Accelerometer, External Power Voltage, DIN1, DIN3, DIN4

Certification & Approvals

Regulatory	CE (RED), EAC, E-Mark, Anatel, UKCA, Ukrainian UCRF, RoHS, REACH, IP67	CE (RED), EAC, E-Mark, Anatel, UKCA, Ukrainian UCRF, RoHS, REACH, IP67
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