

TFT100

CAN /
CAN120



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)

MANUAL CAN & J1939

Functionality support
for data reading

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

Get the required data (including CAN data) from the smart machinery and send configurable commands (Manual CAN commands) in the CAN network to perform specific actions. Configure which J1939 parameters to read from the forklift, crane, or other e-transport with Manual J1939 functionality.

Support various e-scooter brand models' (Askoll, Govecs, Nuuk, FLEX, Bosch, etc.) that suits almost any sharing service business. Connect wireless Bluetooth 4.0 + 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-TAIB0*

*Standard CAN interface

**CAN with integrated 120 ohm resistor

TFT100-TAIBA**

Module

Name Teltonika TM2500

Teltonika TM2500

Technology 2G(GSM/GPRS)/GNSS/BLUETOOTH

2G(GSM/GPRS)/GNSS/BLUETOOTH

GNSS

GNSS Teltonika TM2500

Teltonika TM2500

Receiver L1: GPS, GLONASS, GALILEO, BEIDOU, SBAS*, QZSS*, DGPS*, AGPS*

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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

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
CAN	1	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

*With internal 120 ohm termination resistor

**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
CAN Modes	Manual CAN, Manual CAN commands, Manual J1939, Bosch, Askoll, Default J1939, FLEX, Debug	Manual CAN, Manual CAN commands, Manual J1939, Bosch, Askoll, Default J1939, FLEX, Debug
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)	FOTA Web, Teltonika Configurator (USB, Bluetooth)
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, CAN	Accelerometer, External Power Voltage, DIN1, DIN3, DIN4, CAN

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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