# TFT100 CAN

**HEAVY MACHINERY GPS TRACKER** 

EASILY ADAPTABLE HIGH-VOLTAGE E-MOBILITY &



# DIFFERENT INTERFACES

CAN, RS232, RS485, UART interface support depending on chosen modification Wide power supply voltage range for integration variety (10-97V)

**POWER SUPPLY** 

# MANUAL CAN & J1939

Functionality support for data reading

**INGRESS PROTECTION** Water and dust

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





=1



E-MOTORBIKE



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<sup>®</sup> + 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

#### Module

Name Teltonika TM2500 2G(GSM/GPRS)/GNSS/BLUETOOTH® LE Technology GNSS GNSS Teltonika TM2500 Receiver L1: GPS, GLONASS, GALILEO, BEIDOU, SBAS\*, QZSS\*, DGPS\*, AGPS\* 33 tracking channel Tracking sensitivity 99 acquisition channel -165 dBM Position accuracy Velocity accuracy < 0.1 m/s (within +/- 15% error) Hot start <1S < 25 S Warm start Cold start < 35 s

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

#### Cellular

Technology	GSM/GPRS
2G	GSM: B2/B3/B5/B8
GPRS	GPRS Mobile Station Class B
Data transfer	GSM (GPRS): Max. 85.6 Kbps (DL) / Max. 85.6 Kbps (UL)
Data support	SMS (TEXT, PDU), Network protocols (TCP,UDP,TLS,DTLS)
Power	
Input voltage range	10 - 97 V DC with overvoltage protection
Back-up battery	1800 mAh Li-Ion battery 3.7 V (6.66 Wh)
Internal fuse	3.15 A, 125 V
BLUETOOTH <sup>®</sup> technology	
Specification	4.0 + LE
Supported peripherals	Temperature and Humidity sensors, Universal Bluetooth® LE sensor support



### Power consumption

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

## **Physical specification**

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

#### Operating environment

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

Battery storage temperature -10 °C to +45 °C

# Interface

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

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



Features	
Sensors	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
CAN Modes	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
Configuration and firmware update	FOTA Web, Teltonika Configurator (USB, Bluetooth® wireless technology)
SMS	Configuration, Events, Debug
GPRS commands	Configuration, Debug
Time Synchronization	GNSS, NITZ, NTP
Ignition detection	Accelerometer, External Power Voltage, DIN1, DIN3, DIN4, CAN

# **Certification & Approvals**

Regulatory

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