

# 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*	TFT100-TAIBA**
	*Standard CAN interface	**CAN with integrated 120 ohm resistor

**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*	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

**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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