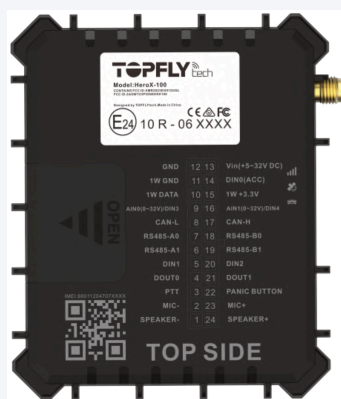


4G ADVANCED HARDWIRED TRACKER

HeroX 100

4G

LTE Cat 1 + 2G with flexible I/Os and BLE Long Range. Hidden installation in any powered asset.



Key features

- 1-Wire interface
- 3 DIN, 2 AIN/DIN, 2 DOUT, 2× 1-Wire
- CAN reading (FMS + J1939)
- 2× RS485 for camera, RFID, fuel sensor, vehicle data (optional)
- Panic button
- Push-to-talk
- 2-way audio
- SD card (optional)
- External antenna (optional)
- BLE Long Range
- Driving behavior monitoring

WEIGHT
80 g (2.82 oz)

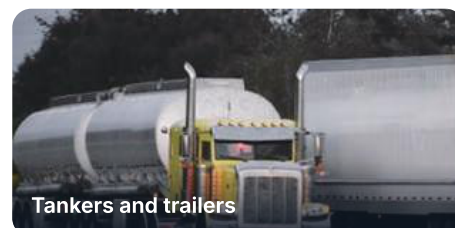
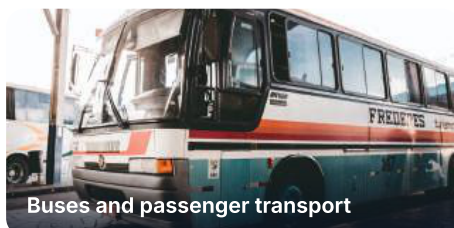
DIMENSIONS
84.5 × 69.7 × 21.8 mm

POWER SUPPLY
5 – 32 V DC

OPERATING TEMP.
-30 °C ~ +80 °C

Applications

CERTIFICATES (PLANNED)



Technical specifications

Network	
Operating bands	LTE FDD Cat 1: B1/B2/B3/B4/B5/B7/B8/B12/B13/B17/B18/B19/B20/B25/B26/B28/B66 LTE TDD Cat 1: B34/B38/B39/B40/B41 GSM: 850/900/1800/1900 MHz
Data transmission	LTE-FDD: max. 10 Mbps (DL), max. 5 Mbps (UL) LTE-TDD: max. 8.96 Mbps (DL), max. 3.1 Mbps (UL) GPRS: max. 85.6 kbps (DL), max. 85.6 kbps (UL)
GNSS	
GNSS chipset	All-in-one GNSS receiver
Parallel GNSS	GPS + BeiDou + Galileo + QZSS (SBAS)
Receiver type	24 tracking / 64 acquisition-channel GNSS receiver
Sensitivity	Acquisition: -148 dBm Reacquisition: -159 dBm Tracking: -162 dBm
Horizontal position accuracy	Autonomous: < 1.5 m CEP
TTFF @ -130 dBm with (without) EASY™	Cold start: < 20 s (30 s) Warm start: < 2 s (2 s) Hot start: < 2 s (2 s)
Interfaces	
Digital inputs	1 positive trigger input for ignition detection 1 negative trigger input for panic button 2 positive trigger inputs for other use (input range 0–32 V; ≥ 5 V: ignition on, ≤ 2 V: ignition off, 2–5 V: unstable status)
Digital outputs	2 digital outputs for relay control
Analog inputs	2 analog inputs (0–32 V DC, can be configured as digital inputs)
RS485	2 RS485 ports
1-Wire	1-Wire temperature sensors and iButton driver ID (max. 8 channels)
Speakerphone	Push-to-talk, or a speaker and a microphone
CAN bus interface	CAN, SAE J1939 (FMS)
microSD	Cards up to 128 GB
Network, BLE antenna	Internal
GNSS antenna	Internal or external (optional accessory)
Indicator LED	Network, GNSS and CAN
FOTA	Yes
Temperature sensor	1 internal sensor
BLE 5.1	Yes
WiFi	2.4 GHz 802.11b (Rx)

Technical specifications (cont.)

Interfaces (cont.)	
Tracker configuration	USB-C connector
General	
Ingress protection	IP41
Dimensions	84.5 × 69.7 × 21.8 mm (3.32" × 2.74" × 0.86")
Weight	80 g (2.82 oz)
Backup battery	Li-Polymer 200 mAh / 3.7 V
Operating voltage	5 – 32 V DC
Operating temperature	-30 °C ~ +80 °C (-22 °F ~ 176 °F)
Storage temperature	-40 °C ~ +85 °C (-40 °F ~ 185 °F)
Air interface protocol	
Transmit protocol	TCP, UDP, MQTT, SMS
Protocol check & encryption	MD5 / AES128
BLE accessory support	Yes
Scheduled timing / angle / distance report	Reports position and status at preset intervals
External power status alarm	Reports when external power is disconnected
Speeding alarm	Reports when speed exceeds the preset value
Towing alarm	From the internal 3-axis accelerometer
Remote control	Remote output control
Network jamming detection	Reports network jamming
Data roaming control	Avoids additional data consumption
Driving behavior monitoring	Aggressive driving detection, e.g. harsh braking and acceleration
Crash detection	Accident data collection for reconstruction and analysis