



## TELE - TRAC

With multiple GSM, Bluetooth & LoRa communications this affordable, low power tracking and telemetry product that helps you keep an eye on your business. A very adaptable product that supports a range of applications that includes industrial, military & Oil & Gas. Coming in at half the size of a smart phone with extremely long battery powered operation, this IP67 device with highly accurate sensor functions allows the end user to adapt the product to most applications. With full two-way communications the system can not only monitor its location and associated sensors but allow remote control of other Input/Outputs.

**TELE-TRAC Specifications - DATA SHEET**

• **General**

- Micro-SDHC Card Configurable 8 – 32 GB Long Life ~11 months – collecting location & sensor data every 60 sec and reporting every 4 hours.
- Optional IP67 rated wiring harness for vehicle and external sensor integration Over-the-Air configuration and firmware update

• **Global Positioning**

- Location Technology 72 channel GPS (with SBAS) Receiver Type GPS L1C/A, SBAS L1C/A, QZSS L1C/A, GLONASS L1OF, GALILEO E1B/C2, BeiDou B1 SBAS Type WAAS, EGNOS, MSAS, QZSS
- Location Accuracy <2.5m Autonomous, 2.0m SBAS Velocity Accuracy 0.1 m/s Heading Accuracy 0.5 degrees
- Tracking Sensitivity -166 dBm Acquisition Sensitivity Hot Start: -156 dBm, 1 sec TTFF Cold Start: -148 dBm, 30 sec TTFF, 3 sec aided Max Update Rate 18 Hz

• **Sensors**

- 3-axis Accelerometer 2/4/8 G, Free fall detection 3-axis Gyro +/-250, +/-500, +/-2000 dps full scale Electronic Compass Full Range: ± 1000 µT Temperature Sensor -40° – 85° C

• **I/O**

- CAN Bus 2.0b (ISO 11898-2/5) J1939 (FMS readout ready) Digital & Analog I/O 4 Digital inputs, 4 Digital outputs ADC – 2x 12bit max 1 MSps inputs DAC – 2x 12bit max 0.5 MSps outputs

• **Battery Type**

- 3.7 VDC Lithium Ion (1150 mAh) Power/Data Connector Custom ip67 connector and charging/programming dock

• **Communications**

- Cellular GSM/GPRS 850/900/1800/1900 MHz
- Available Protocols TCP, UDP, FTP, HTTP
- Output Power 850/900 (Class 4) – 2W 1800/1900 (Class 1) – 1W

• **SIM Form Factor Micro-SIM**

• **Bluetooth Radio**

- Type 4.0 LE single mode Frequency 2.402 - 2.480 GHz Max Transmit Power +4 dBm Receive Sensitivity -91 dBm

• **Low Power ISM Radio**

- Type ISM band Custom over-the-air protocol Frequency 915 MHz Max Transmit Power 20 dBm Receive Sensitivity -97 to -148 dBm Max Range 2-5 km urban, ~15 km rural

• **Environmental Temperature**

- -40° to +85° C (storage & operating)
- Humidity 95%RH @ 50° C non-condensing
- Shock and Vibration MIL STD 810E Method 514.4, Category 10 IP 67 Dust tight
- Submersible to 1m for 30 minutes
- Altitude Max 15,000 m
- Chemical Impervious to diesel fuels and related chemicals.
- Will not degrade with direct sunlight and sea-spray.

• **Physical Dimensions**

- 55 mm(L) x 35 mm(W) x 10 mm(H) Weight 65 grams Certifications Radio CE, FCC – in process

• **RoHS Compliant**

## Product Overview

VARI-TRAC offer a range of Standard Products that complement our Customised Solutions and Service offering.

Our agile design process enables a complete range of asset tracking solutions that covers a broad range of industries and applications.

### Product Highlights Include

- GPS
- LoRa
- Bluetooth 4.0
- Bluetooth 5.0
- Quad Band GPS
- Quad Band GPRS
- Micro SIM
- Micro SDHC
- Digital I/O
- 3 Axis Gyro

Applications - include Logistics, Automotive, Industrial, Agricultural, Governmental, Civil, Maritime, Defence & Domestic.....



VARI-TRAC Telemetry Range	TAG-TRAC	TELE-TRAC	SAT-TRAC	SAFE-TRAC	SENSOR-TRAC	SECURE-TRAC	TRAIL-TRAC	LEVEL-TRAC
<b>Hardware</b>								
3-axis Accelerometer	✓	✓	✓	✓	✓	✓	✓	✓
3-axis Gyro	✓	✓	-	✓	✓	✓	✓	✓
Analogue I/O	-	✓	-	✓	✓	✓	✓	✓
Bluetooth 4.0 / 5.0	✓	✓	✓	✓	✓	✓	✓	✓
CAN Bus 2.0b	✓	✓	-	✓	✓	✓	✓	✓
Data Encryption	✓	✓	✓	✓	✓	✓	✓	✓
Digital I/O	✓	✓	-	✓	✓	✓	✓	✓
Electronic Compass	✓	✓	-	✓	✓	✓	✓	-
Emergency button	✓	-	-	-	-	-	-	-
GPS Tracking	✓	✓	✓	✓	✓	✓	✓	✓
Humidity Sensor	-	-	-	-	✓	-	-	-
Intrinsically safe IP-67 case	-	-	-	✓	-	-	-	-
Light Sensor (optical)	-	-	-	-	✓	-	✓	-
Lock Mechanism for cable	-	-	-	-	-	✓	-	-
Lock Mechanism for case	-	-	-	-	-	✓	-	-
Locking Activation System	-	-	-	-	-	✓	-	-
LoRa Transceiver	✓	✓	-	✓	✓	✓	✓	-
Microphone (overt and covert)	-	✓	-	-	✓	-	-	-
Micro-SDHC Card	-	✓	-	✓	✓	✓	✓	-
Micro-SIM	-	✓	-	✓	✓	✓	✓	✓
Over-the-air Firmware Update	-	✓	✓	✓	✓	✓	✓	✓
Proximity Sensor	-	-	-	-	✓	-	✓	-
Quad Band GSM/GPRS	-	✓	-	✓	✓	✓	✓	✓
Security hardened IP-67 case	-	-	-	-	-	✓	-	-
Shock Sensor	-	-	-	-	✓	-	✓	✓
Speaker output (overt and covert)	-	✓	-	-	-	-	-	-
Temperature Sensor	✓	✓	✓	✓	✓	✓	✓	✓
Tilt Sensor	-	-	-	-	✓	-	✓	✓
Wide Range Temperature Sensor	-	-	-	-	✓	-	-	-

**Contact Details**

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