



Sat-Trac

Vari-Trac is a global provider of innovative solutions for real-time monitoring and our Sat-Trac Iridium Satellite communication system provides an added dimension and cost effective solution to standard VSAT links.

With inbuilt GPS positioning the system is ideal for prime asset tracking with Satellite communication or as secondary / parallel system where asset tracking and system monitoring is a key objective.

A global business needs the ability to remotely monitor its assets, their performance, repair state and their utilisation. Added to this they are demanding to know in real-time changes equipment status, location and fault reporting to support KPI's.

Sectors

- Remote Asset Management
- Remote Asset Tracking
- Remote emergency alarm
- Service and Maintenance schedule
- Security and protection services

Solution

Our fully integrated and flexible Sat-Trac solution provides a tamper prove system utilising advanced data transmission compression algorithms for bi-directional data.

The Sat-Trac uses propriety Bluetooth communication to commute to the Vari-Trac range of products.

The additional features of temperature, vibration and motion detection provide value added tech-



Applications

- Remote station monitoring via satellite link
- Harsh environment equipment tracking
- Remote vehicle tracking
- Equipment status
- Temperature monitoring
- Vibration monitoring
- Theft protection / Alarm
- Real time analysis
- Tracking hazardous material
- Performance monitoring
- GPS tracking and tagging of loading and unloading vehicles
- SatCom Communication link with all Vari-Trac product range via Bluetooth
- Long life battery for remote operations
- Geofenced support
- Cost effective solution



<http://www.vari-trac.com>

Ref: VT_Sat-Trac_June_18



Data sheet and performance

Environmental	Temperature:	Storage: -55°C to + 125°C Ambient Operating: -40°C to +85°C Ambient
GPS	Tracking capability: SBAS type: GPS accuracy: GLONASS accuracy: Velocity accuracy: Heading accuracy: Anti-jamming:	72 channels WAAS, EGNOS, MSAS, QZSS, GAGAN 2.5 m Autonomous, 2.0 m SBAS (CEP, 50%, -130 dBm, > 6 SVs) 4.0 m CEP, 50% 0.05 m/s 0.3 degrees Active CW detection and removal, on-board 2x SAW filter
Bluetooth LE v5.0	Type:	v5.0 BLE (compatible with 4.0 - 4.2)
Encryption	AES:	AES HW encryption
Accelerometer	Type: Sensitivity: G Range: Free fall detection:	3-axis MEMS linear accelerometer 1 mg/LSB (12bit ADC) @2G range 2/4/8 G Yes
Temperature sensor	Type: Range: Accuracy: Max resolution:	Digital Thermometer -40°C to +125°C ± 0.1°C 0.01°C (14 bit)
Communications	Iridium SBD (Short Burst Data) Micro-Burst TDD: Transceiver: Transmit Current: Receive Current: Idle Current: SBD Message Transfer: Coverage:	1616 to 1626.5 MHz TDMA/FDMA Mobile originated up to 340 Bytes / Mobile terminated up to 270 Bytes Peak 1.3A / Average 145mA Peak 156mA / Average 39mA Peak 156mA / Average 34mA Average current 158mA / Average power <=0.8W Pole to Pole Global Earth Orbiting
Power	Power supply / battery:	5-14 VDC



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