

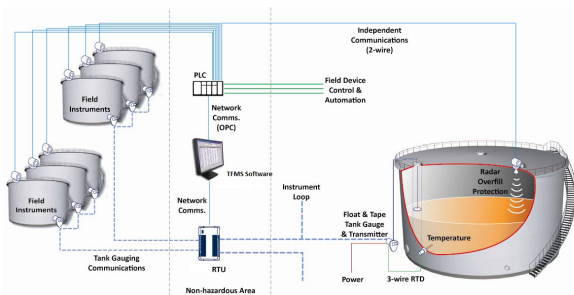
Tank Farm Asset Management

Vari-Trac is a global provider of innovative solutions for real-time monitoring and control of liquid assets and the status and performance of equipment & machinery.

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 to, level, consumption, operating temperature and vibration status to support KPI's.

Sectors

- Tank Farm Management
- Level control management
- Liquid asset management and status
- Service and Maintenance schedule
- Security and protection services



Solution

Our fully integrated and flexible solution provides a tamper prove system for liquid level monitoring. The additional features of temperature, vibration and motion detection provide value added technology. Advanced data transmission compression algorithms provides for bi-directional data options for GSM, Satcom, WiFi and Bluetooth.



Applications

- Tank status and level
- Temperature monitoring
- Vibration monitoring
- Auxiliary sensor input
- Theft protection / Alarm
- Real time analysis
- Analysis of liquid age and validation of expiration period
- Tracking hazardous material
- Weather sensor monitoring
- Performance monitoring
- Remote control of valves, heaters, chillers, agitators
- GPS tracking and tagging of loading and unloading vehicles





Data sheet and performance

Environmental	Temperature:	Storage: -55°C to + 125°C Ambient Operating: -40°C to +85°C Ambient
GSM/GPRS	GSM/GPRS Bands: SIM form factor:	Quad Band Nano SIM (4FF, ETSI TS 102 221 V9.0.0, Mini-UICC)
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)
SD Memory Card	Type: Max capacity:	Micro Secure Digital HC (microSDHC) 32 GB
Input / Output Interface	Digital I/O:	4 x Digital Inputs 4 x Digital outputs
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
Heading sensor	Type: Sensitivity: Full Range:	3-axis MEMS magnetometer 0.10 μ T/LSB \pm 1000 μ T
Temperature sensor	Type: Range: Accuracy: Max resolution:	Digital Thermometer -40°C to +125°C \pm 0.1°C 0.01°C (14 bit)
Level sensor	Type: Max depth: Compensated: Accuracy:	Capacitive level sensor 5 m Temperature, air K, liquid K 0.10%
Power	Power supply / battery:	5-14 VDC



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

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