



NB-IoT/CAT-M1 Logger Exi

With flexible sensor/meter connection options, the battery powered Intrinsically safe LPG logger is suitable for monitoring fuel tanks levels and flow rate.

Applications

- LPG/Propane tank dial-gauge position measurement
 - Rochester R3D/Twinsite Senior/Junior
- Pressure sensor based vented tank liquid level monitoring
 - Kerosene, Diesel, Gasoline
 - Oils/Waste Oils
 - Other hazardous/non hazardous
- Utility meters/Flow meters
 - Pulse output accumulation and reporting
- Tanks
 - Fixed or mobile
 - Vented or pressurised
 - Underground
 - Tank size limited only by the capability of the sensor connected
- Spot and continuous inventory measurement
- Configurable reporting schedule and alarms



Benefits

- Accurate, reliable tank level reporting to server monitoring application
- Highly configurable server reporting interval from hourly to once per month
- 28 slot logger with configurable logging interval
- Optimise delivery or collections
- Programmable Alarms
 - High level
 - Low levels
 - Rate of level change (fill or drain)
- Reports local temperature, RSSI, and battery level
- External antenna option for underground locations
- Remote re-configurability
- Plug and play installation
- Mounting/attachment options – wall/pole
- CE Conformance and ROHS Compliant



Characteristic	LPG logger 4G NB-IoT/CAT-M1
Dimensions Weight	130mm x 125mm x 61mm / 5.1" x 4.9" x 2.4" (excluding cable gland/external connector) Weight 350g/0.77lbs
Housing Material	Moulded plastic, 2-part, material Glass Reinforced Polyamide, UV resistant.
Operating Temperature	-30°C to +55°C / -22°F to 131°F
Storage Temperature	0°C to 30°C / 32°F to 86°F
Humidity	0 – 100% RH
Environmental Protection	IP68
Communication	LTE CAT-M1 or NB-IoT With GPS.
Pressure sensor	Pressure sensors from various manufacturers operating from 5V supply may be connected. 0V to 5V ratiometric with programmable scaling
Dial-gauges	5V Rochester Senior/Junior Twinsite/R3D (Rochester DS-1318.pdf compatible as standard)
Accuracy/resolution	10-bit A/D resolution, Accuracy is dependent on the gauge used
2 x Pulse counter inputs option	2 x volt free switch inputs with pull up resistors to 5V
Loop current measurement option	120 ohm internal load. 4-20mA measurement possible with external energising source.
Serial data	Serial data support is possible – Contact factory
Power requirements	Battery pack with standard cell sizes connected with a 2 wire harness included
Battery technology	3.6V Lithium Thionyl Chloride Exi "Bobbin type" construction
Battery life	Up to 10 years*
Safety	ATEX Zone II 1 G-Ex ia IIB T4 Ga [-30 < Ta < +55°C / -22°F to 131°F] and IECEx/Hazloc equivalents (Excludes D Cell)
Conformance	CE, IECEx, RoHs, RED
Manual Activation	Magnetically activated reed switch / Audible buzzer / Internal LED
Installation	Plug and play installation. Shipped pre-configured with customer supplied SIM card and Rochester gauge installed

* Based on 1 communication per day and good network coverage

Configuration/Specification Options

External connection	IP68 Cable gland (side or bottom) / IP68 bulkhead connector
Server radio communications	PTCRB (AT&T) & Verizon approvals. FCC, RED, CE approvals.
Antenna	Internal with option for antenna coupler with SMA connector to allow connection of an external GSM antenna
Battery size	Several options up to a D cell size are available
Data Communications	Tekelek proprietary protocol
Fixing/Mounting	Screw mounts (4), tie wrap, & pole mount features are standard.

