

TEK 898 Cellular Pressure Exi (ATEX and C1/D1 approvals)

Supplied with a pressure level sensor, the battery powered intrinsically safe liquid level logger is suitable for monitoring tank levels.

Applications

- Liquid Pressure Sensor
 - Fuel (Gasoline, Diesel, Kerosene, other).
 - Oil and waste oil, lubricants, coolants, additives.
 - Water, chemicals (subject to compatibility)
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- Tanks
 - Fixed or mobile
 - Underground
- Spot and continuous inventory measurement



Benefits

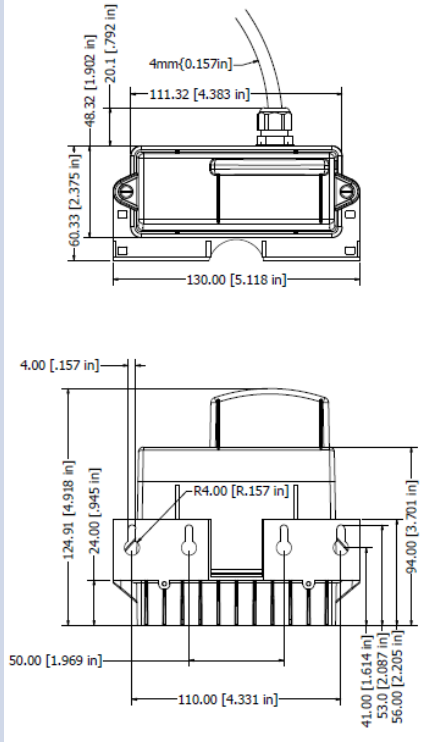
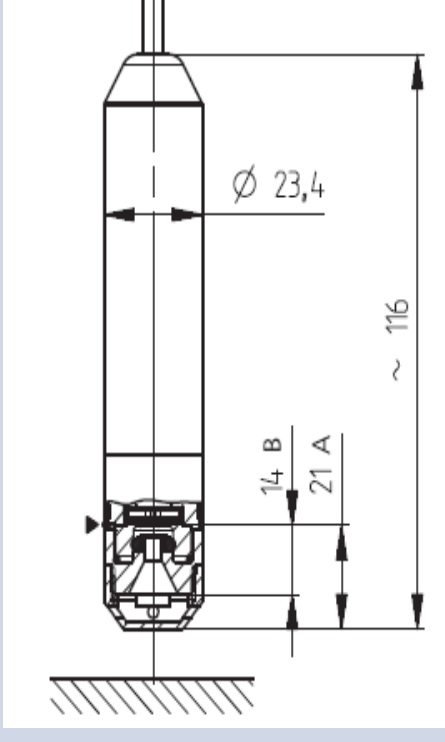
- Accurate, reliable tank level reporting to server monitoring application
- Highly configurable server reporting interval from hourly to once per month
- 28 slot logger with configurable logging interval
- Optimise delivery or collections
- Programmable Alarms
 - High Level
 - Low levels
 - Rate of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



DS-5080-09

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Specification		
Characteristic	Liquid Level Logger 4G LTE-M	Pressure Sensor
Dimensions	 <p>Technical drawing of the Liquid Level Logger 4G LTE-M. The top view shows a rectangular device with a width of 130.00 mm [5.118 in] and a height of 60.33 mm [2.375 in]. A cable is attached to the top, with a diameter of 4mm [0.157 in]. The side view shows a height of 124.91 mm [4.918 in] and a width of 110.00 mm [4.331 in]. Other dimensions include 4.00 mm [0.157 in], 20.1 mm [0.792 in], 111.32 mm [4.383 in], 48.32 mm [1.902 in], 20.1 mm [0.792 in], 41.00 mm [1.614 in], 53.0 mm [2.087 in], 56.00 mm [2.205 in], 94.00 mm [3.701 in], and R4.00 [R.157 in].</p>	 <p>Technical drawing of the Pressure Sensor. It is a cylindrical device with a diameter of $\varnothing 23,4$ mm. The total height is approximately 116 mm. The drawing shows a side view with a mounting base and a cable extending from the top. Dimensions include 1/4 B and 21 A.</p>
Safety IECEx/ATEX	Ex ia IIB T4 Ga Class I zone 0 AEx ia IIB T4 Ga Complies with UL913 II 1 G-Ex ia IIB T4 Ga [-30 < Ta < +55°C] SIRA15ATEX2103 X IECEx CSA 15.0006X	SEV 12 ATEX 0138 II 1 G Ex ia IIC T4 Ga IECEx SEV 12.0006 Ex ia IIC T4 Ga Complies with UL913, Class 1, Zone 0
Operating Temperature	-30°C to +55°C / -22°F to 131°F	-20°C to 80°C / -4°F to 176°F
Storage Temperature	0°C to 30°C / 32°F to 86°F	0°C to 30°C / 32°F to 86°F
Sensor Range	Sensor - 1 bar / 14.5 psi, suitable for measuring up to 10.2m/33.4ft of water / 12.4m/40.6ft of kerosene. Cable lengths are 5m(16.4ft), 10m(32.8ft), 15m(49.2ft) as standard. For custom lengths please consult factory. Note 1	
Environmental Protection	IP68 - Outdoors	IP68 - Outdoors
Communication	LTE CAT-M1 or NB-IoT with GPS	
Installation	Plug and play installation. Can be shipped pre-configured with SIM including connectivity for 3 years	

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Power requirements	Battery pack installed with a 2 wire harness included.	5V +/- 10% DC (Powered by Logger)
Battery technology	3.6V Lithium Thionyl Chloride Exi "Bobbin type" construction	N/A
Housing Material	Moulded plastic, 2-part, material Glass Reinforced Polyamide, UV resistant.	PD-HD Cable, SS 316L housing, EPDM seal
Weight	Product weight with 5m,10m,15m cable length :1045g/37oz ; 1150g/40oz ; 1255g / 44oz (including cable & gland/external adapters)	
Resolution	N/A	0.5% of FS (Note 1)
Accuracy	N/A	Max : +/- 2% of FS : Typical +/- 1% of FS. -20°C to 55°C / -4°F to 131°F
Battery life	Up to 10 years (Note 2)	N/A
Manual Activation	Magnetically activated reed switch / Audible buzzer / Internal LED	N/A
Humidity	0 – 100% RH	0% - 100% RH
Certification	PTCRB, AT&T & Verizon approvals RED, FCC, CE, RoHSm ATEX, IECEx, Complies to UL913 C1 D1	ATEX, IECEx, CE, EN 61326-2-3, EN 61010-1, EMC directive 2014/30/EU,

Operations

The intrinsically safe Exi pressure sensor provides a ratiometric output in the range of 0.5V....4.5V for a 5V input.
An NPT 1" / 25.4mm adapter with a cable gland cord grip is provided on the cable to facilitate installation of the sensor.
0.3 bar / 5m cable provided as standard. Other options available on request.
Please refer to the installation manual for advice on how to install pressure sensor for best performance.

Configuration/Specification Options

External connection	IP68 Cable gland
Antenna	Internal with option for antenna coupler with SMA connector to allow connection of an external GSM antenna
Data Communications	Customised for efficient binary protocol
Fixing/Mounting	Screw mounts, tie wrap & pole mount features are standard

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