## WATTECO



## LEV'O+ LPG gauge for TORAN'O



Rochester Gauges

The **LEV'O+ LPG Level** solution enables remote reading of LPG gas tank levels. The tank level is measured and transmitted periodically over the LoRaWAN® network to the remote application. The unit is composed of the TORAN'O AtEx zone 1 sensor and a Rochester Gauge.

Connector to external

TORAN'O transmitter

#### **APPLICATIONS**

- In a Hazardous Area, remote reading of LPG tank level.
- Optimisation of LPG distribution logistics.

#### **BENEFITS & KEY FEATURES**

- Easy to deploy and use
- Plug & play with TORAN'O device (not supplied)
- Probe power supplied by TORAN'O for the duration of the measurement
- Usable in AtEx zone 1 area when it's connected to TORAN'O
  - Remote level measurement probe on 2m cable:
    - Output voltage: ratiometric 10-90%
    - Accuracy: +/- 4% of full scale.
    - Horizontal LPG tank (vertical on demand)

#### **QUALITY & RELIABILITY**

- RED, RoHS
- AtEx zone 1 area when it's connected to TORAN'O

**LEV'O+ LPG** has to be connected to the **TORAN'O** device to offer a full solution to monitor the level of LPG in a tank.

The Hall Effect Transmitter is based on the transformation of the magnetic field from the specific pointer to an electrical signal proportional to the volume (in %) of the liquid inside the horizontal tank and this which is the dial size (Junior, Senior).

The transmitters work as Voltage divider (Vout = %Vin).

The Hall Effect transmitter is a magnetically-driven, Hall Effect, voltage output sender with potted wires and cable.

Senders are utilized where direct reading plus an electrical signal to a remote level indication are required.

Hall Effect is a solid-state technology with no contacts.

It counts on the fact that a magnet bends the path of electrons moving through a semiconductor. This bending is detected and converted into a ratiometric voltage output.



Many existing domestic storage tanks are equipped with weak drive magnets suited for low friction directindicating dial assemblies. As the Hall Effect Twinsite is a contactless sensor it can be utilized for a retrofit on these vessels to provide an electrical output which can be used for remote indication of tank levels.

The Hall Effect provide the easiest to read local indication by using a dial face divided into percentage units.

#### THE LARGEST IOT PRODUCTS RANGE FOR YOUR PROJECT

WATTECO is a European leader in the design and manufacture of smart IoT devices to suit all remote reading and data collection solutions.

WATTECO is a LoRa Alliance® member.



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### **TECHNICAL DATA**

HALL EFFECT TRANSMITTER	
Accuracy	± 4%
Hysteresys	Less than 3% typical
Repeatability	± 2%
Resolution	Infinite
Operating Voltage range	5VDC ±0.5
Output voltage	Ratiometric 10-90% of input voltage @ 10-90% volume Ratiometric means that the output signal voltage is proportional to the input voltage (Vin) Under 5VDC, "Empty" is 0.5V (or 10% of input voltage) 90% is 4.5V (or 90% of input voltage)
Output interface	6-pin Amphenol– Plug & Play with TORAN'O device
OPERATING CONDITIONS	
Temperature	-20°C +65°C
DIRECTIVES & STANDARD	
European Directives Low Voltage 2006/95/EC, EMC 2004/108/EC, RoHS	

**PRODUCT NUMBER** 

REFERENCE	DESCRIPTION
50-70-210	LEV'O+ LPG Level Rochester Junior for TORAN'O
50-70-211	LEV'O+ LPG Level Rochester Senior for TORAN'O

