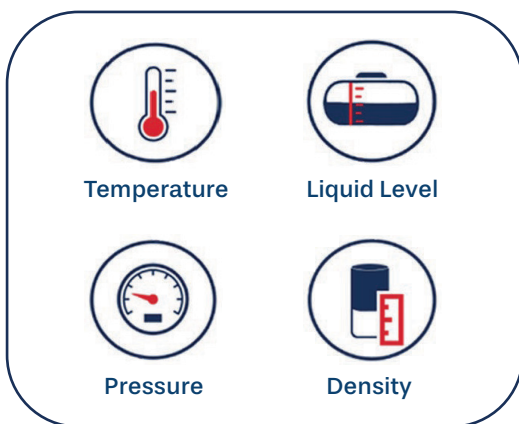


A high tech, IoT Device that securely transmits data to our online portal for Tank Monitoring of pressurised tanks in Hazardous Areas.

Parameters Calculated:



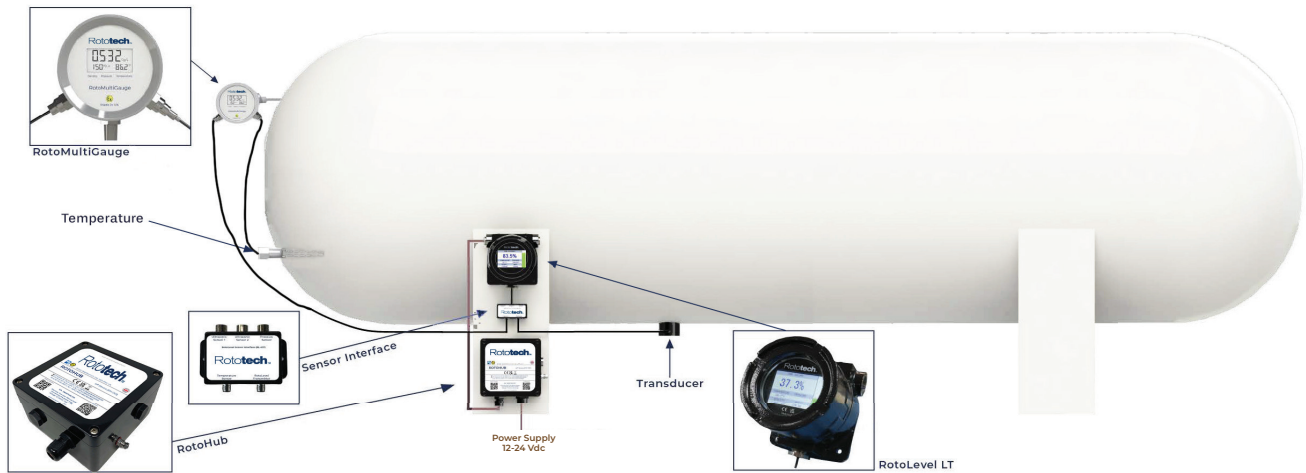
FEATURES:

- Connects and communicates to tank sensors
- Seamlessly integrates with our in-house designed Data Portal
- Securely transmits data using global cellular communications

BENEFITS:

- Highly robust and fully certified for use in a hazardous zone
- Monitor IoT devices, asset performance and security with bi-directional communications
- Receive real-time alerts and custom reports on network health and device conditions
- Software and firmware updates can be performed Over The Air (OTA)
- Remote Support (quick resolution without site visit needed)

MEASUREMENT PRINCIPLES:



The RotoLevel LT uses Ultrasonic Technology and temperature sensors to determine accurate & reliable measurements. The sensor is connected to the base of the tank and emits a sound wave which travels through the tank medium and reflects back from the liquid surface.

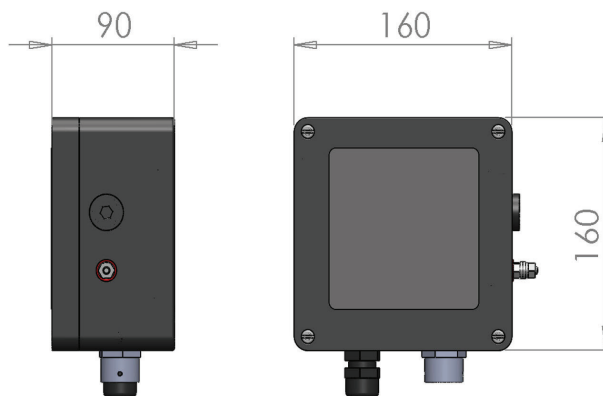
The time of flight from emission to receiving the signal, together with temperature compensation and density of the liquid, is then processed and calculated by the system to determine the height of the liquid.

Each device is calibrated in our in-house laboratory using equipment traceable to UKAS/NIST standards.

The RotoLevel is connected to our telemetry device, (RotoHub) which then allows for duplex communications:

- 1 - Data is sent to our secure online portal for inventory control analytics accessible via any computer/tablet/mobile.
- 2 - Firmware/software updates can be automatically made to the devices at any time, always ensuring latest version.
- 3 - Our support team can remotely access the RotoLevel system to diagnose or resolve any issues that may arise.

DIMENSIONS:



TECHNICAL SPECIFICATION:

Main Power	24 VDC ± 10% (up to 1.6A depending on systems connected)
Serial Communications	RS485 Modbus RTU (2 off)
Cellular Communications	EMEA/Thailand/India LTE-FDD: B1/B3/B5/B7/B8/B20, WCDMA: B1/B5/B8, GSM/EDGE: B3/B8 North America LTE-FDD: B2/B4/B12, WCDMA: B2/B4/B5
GPS	GPS/GLONASS/BeiDou
Bluetooth	BLE
High Pressure Alarm Output	Solid State Relay Output NO-NC, 24V 170mA (Max) AC/DC
Weight	2KG (4.5lb)
Size	160x160x90mm (6.3"x6.3"x5.5") excluding glands
Enclosure Material	Industrial Polyester
Operating Temperature	-20 to 50°C / -4 to 120°F
Certification and Compliance	EN 60950: Information technology equipment, Safety and General requirements for equipment installed outdoors. EN 30148: EMC RF EN 61326: EMC Immunity Test CFR47: 2011 FCC conducted and radiated emissions
Entrees	3x M20 Entries
Cable	2x Pair screened 24 AWG to 18 AWG
Terminal Torque	4.45 to 5.34in/lb (0.5 to 0.6 N-m)
Mounting	Wall
Hazardous Area Approvals	II 3 G Ex ec IIC T4 Gc (-20°C ≤ Ta ≤ + 50°C) Baseefa19ATEX0103X II 3 G Ex ec IIC T4 Gc (-20°C ≤ Ta ≤ + 50°C) BAS21UKEX0010 Ex sc IIC T4 Gc (-20°C ≤ Ta ≤ + 50°C) IECEx BAS 19.0092X
Ingress Protection	IP56

APPLICATION AREA:

- Chemical
- Industrial
- Oil & Gas

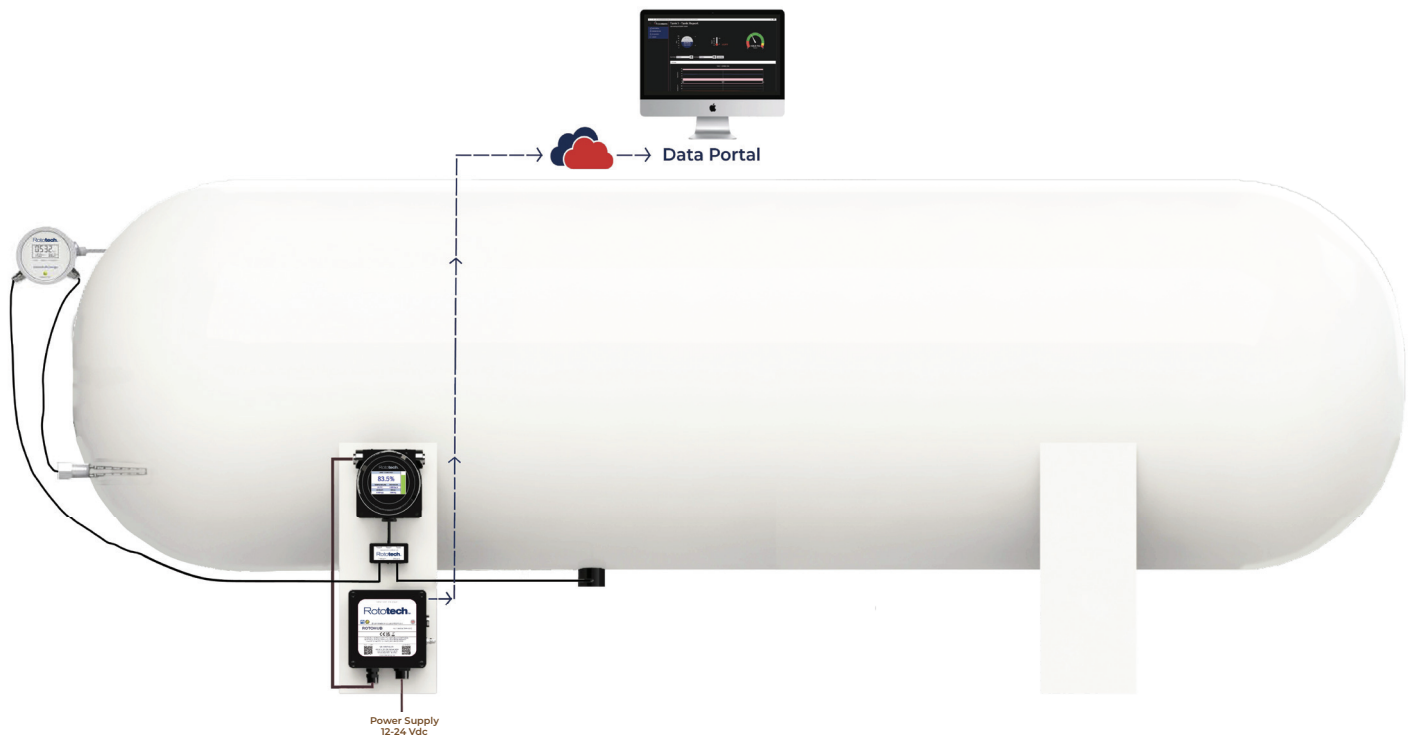


Horizontal Tank



Vertical Tank

ONLINE DATA PORTAL:



The RotoHub is the connection between our RotoLevel LT and our Secure Online Data Portal. Each RotoHub can accommodate up to a maximum of 4 RotoLevel LT devices.

Connecting the RotoLevel LT to our RotoHub allows for the following;

1. Remote Support

Our engineers are able to view the system 24/7 to resolve issues and/or provide automatic software or firmware updates.

2. Data Analytics

Our easy to use, secure online portal allows the user to monitor and control their tank inventory. Data is transmitted every 15 minutes ensuring real-time monitoring of level and temperature. The portal has ability to view historical data and set up various alarms for managing min/max limits.

3. Full Inventory Control

When connected with our pressure transmitter (**RotoMultiGauge**) we are able to provide pressure, density and mass analysis in real-time.