

A certified high accuracy, battery powered digital gauge, that measures one or multiple parameters (pressure & temperature)

FEATURES:

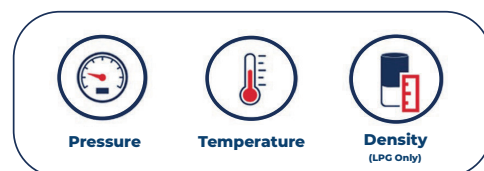
- Certified for use in hazardous areas (ATEX, IECEx, UKEX)
- Displays either Pressure or Temperature, or both
- For LPG applications, can calculate and display Density of the liquid
- Measures pressure from 0-1000bar with +/-0.5% accuracy
- Male 1/4" NPT connector as standard (other thread types available on request)
- Measures temperature from -55 °C to 125 °C +/- with 0.5°C accuracy (from -10°C to +85°C)
- Temperature probe is adjustable from x to x diameter stainless steel sheath
- Calculates density to within +/- 0.5%
- Device is Battery Powered (Battery life 1 year+) or can be powered via the RotoLevel (12 to 24V)
- Seamlessly integrates with our in-house designed Portal via RotoHub (telemetry device) to allow remote monitoring/analysis
- LCD Display
- 100mm / 4" diameter 304 stainless steel case and bezel

BENEFITS:

- 3 in 1 – pressure, temperature and density in one digital instrument used on your storage tank (density for LPG applications only)
- Can be used a single measurement device: pressure only, or temperature only
- Better control of your inventory
 - when integrated with our RotoLevel LT device can calculate liquid level within 0.5% accuracy.
- Transfers all information through to our telemetry device (RotoHub) to provide real-time analysis of your tank via our secure online portal
 - remote support (quick resolution without site visit needed)



Parameters Measured:



TECHNOLOGY:

The RotoMultiGauge uses the latest technology to provide a highly accurate and reliable pressure/temperature measurement.

Pressure Technology: A high quality pressure transducer combined with additional in-house calibrations/compensation.

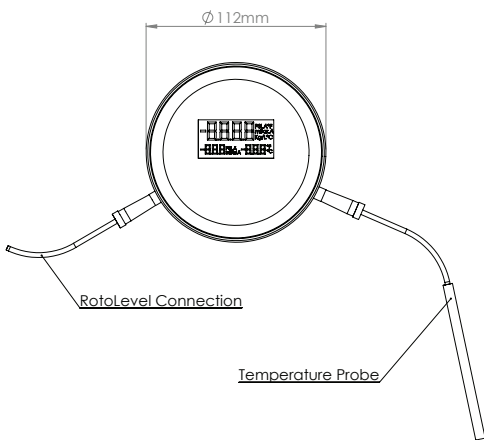
Temperature Technology: The probe uses a DS18B20 digital thermometer providing 12 bit Celcius/Farenheit temperature measurements with non volatile user programmable upper and lower trigger points. It communicates over a 1-Wire bus that by definition only requires one data line for communication with the central microprocessor.



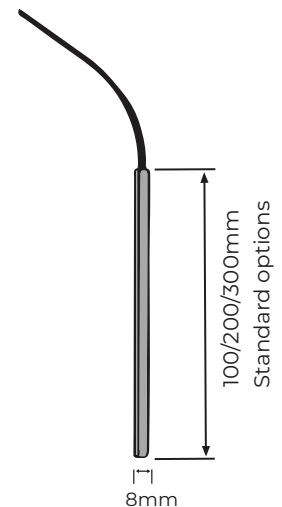
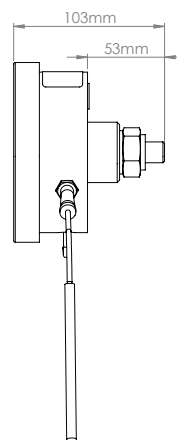
The RotoMultiGauge also forms part of an innovative high technology solution for controlling the inventory of a storage tank. When integrated with our ultrasonic level measurement device (RotoLevel LT) and telemetry device (RotoHub), the user is able to manage and control their tank inventory via our secure online DataPortal.

More details on Page 6.

MULTIGAUGE DIMENSIONS:



PROBE DIMENSIONS:



PRESSURE RANGES:

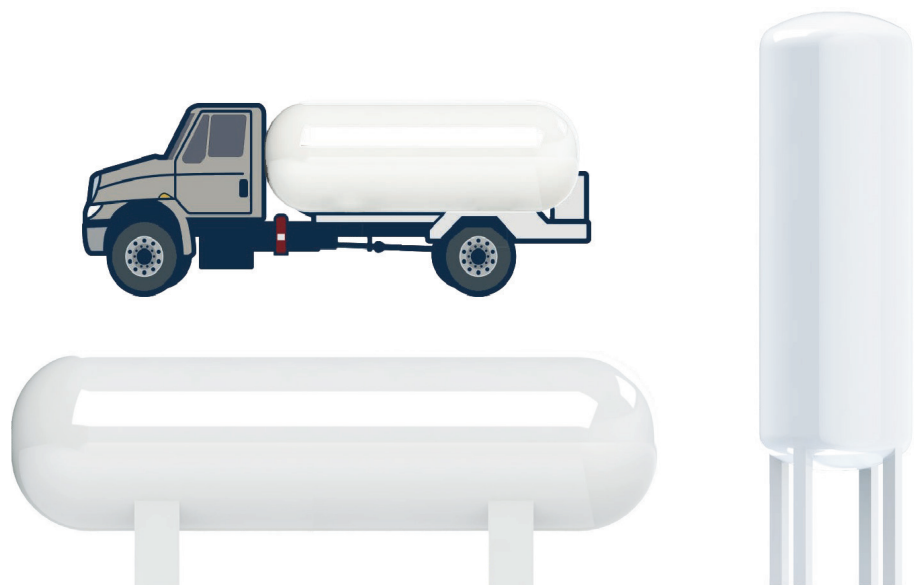
Bar Range	Resolution	PSI Range	Resolution	Accuracy
0 to 1	1 mbar	0 to 15	0.01 PSI	0.5%
0 to 2	1 mbar	0 to 30	0.01 PSI	0.5%
0 to 3	1 mbar	0 to 45	0.01 PSI	0.5%
0 to 5	1 mbar	0 to 75	0.01 PSI	0.5%
0 to 10	10 mbar	0 to 150	0.1 PSI	0.5%
0 to 30	10 mbar	0 to 450	0.1 PSI	0.5%
0 to 70	10 mbar	0 to 1000	1 PSI	0.5%
0 to 100	100 mbar	0 to 1500	1 PSI	0.5%
0 to 200	100 mbar	0 to 3000	1 PSI	0.5%
0 to 400	100 mbar	0 to 6000	1 PSI	0.5%
0 to 1000	1 bar	0 to 15000	10 PSI	0.5%

TEMPERATURE RANGES:

Range	Accuracy
-55°C to 125°C or -65°F to +150°F	+/- 0.5°C (-10°C to +85°C)

APPLICATION AREA:

- Industrial Pipes
- Pressurised Tanks;
 - Truck/Bobtail
 - Vertical Tank
 - Horizontal Tank



TECHNICAL SPECIFICATION:

Nominal Size Case	100mm/4" - 304 Stainless Steel
Classification	Exia IIC T4 Ga (-20°C to 60°C)
Pressure Ranges	0 - 1000 bar
Resolution	See table - page 3
Overpressure	See table - page 3
Pressure accuracy	0.5% FS
Temperature range	-55 to 125°C
Temperature accuracy	0.5°C
Battery life	1 year continuous operation (when connected to RotoLevel device, this device will be mains powered)
Pressure connection	¼" NPT male (other thread types available upon request)
Protection Rating	IP65
Mounting	Direct Mount, Surface Mount, Panel Mount (bottom & back entry)
Stem	Capillary Stem
Power Source	Battery and/or RotoLevel (12 to 24V)
Longterm Stability	Annual recalibration recommended

ONLINE DATA PORTAL:

Model	Mounting	Connection	Pressure Range	Temperature Units	Temp Probe Length	Temp Probe Wire Length	Calibration	Connected to RotoLevel	Pressure Units	Display Density (LPG Only)
RMG	BT BA	B N X	1 - 12	°F °C X	1 - 5 99 X	1 - 5 99 X	1 2	Y N	1 - 6	Y N

<p>RotoMultiGauge</p>	<p>1/2" BSP male 1/2" NPT male Other</p>	<p>Degrees Fahrenheit Degrees Celsius No Temperature Required</p>	<p>2 = 2 meters 5 = 5 meters 99 = Custom Length X = No Temp Required</p>	<p>Yes No</p>	<p>Yes No</p>
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<p>Bottom Entry Back Entry</p>	<p>1 = 0 to 0.5 (R) 2 = 0 to 15 (R/A) 3 = 0 to 30 (R/A) 4 = 0 to 45 (R/A) 5 = 0 to 75 (R/A) 6 = 0 to 150 (R/A) 7 = 0 to 450 (R/A) 8 = 0 to 1000 (A) 9 = 0 to 1500 (A) 10 = 0 to 3000 (A) 11 = 0 to 6000 (A) 12 = 0 to 15000 (A)</p>	<p>1 = 100mm 3 = 200mm 5 = 300mm 99 = Custom Length X = No Temp Required</p>	<p>Factory calibration cert UKAS calibration cert</p>	<p>1 = mbar 2 = mbar.A 3 = bar 4 = bar.A 5 = PSI 6 = PSI.A</p>
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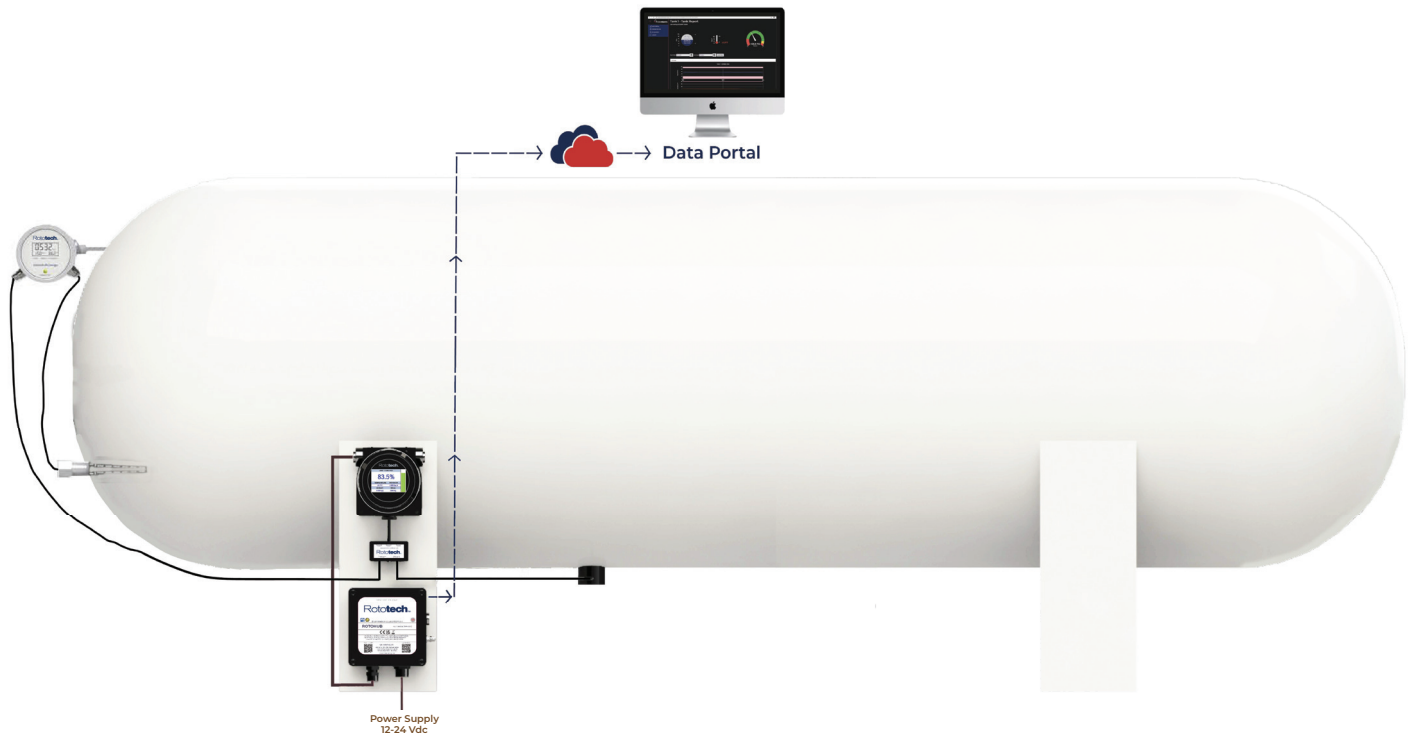
(A) = Absolute pressure
(R) = Relative pressure

MODEL CODE:

Model	Mounting	Connection	Pressure Range	Temperature Units	Temp Probe Length	Temp Probe Wire Length	Calibration	Connected to RotoLevel	Pressure Units	Display Density (LPG Only)
RMG										



ONLINE DATA PORTAL & INVENTORY CONTROL:



To enable full inventory control of your storage tank, The **RotoMultiGauge** can be seamlessly connected with our certified **RotoLevel LT** device (non-invasive ultrasonic level measurement) and our certified **RotoHub** (telemetry device), allowing data to be analysed and managed through our secure **Online Data Portal** from any smart phone, tablet or computer.

Connecting these devices 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 parameters (level, pressure, temperature, density, mass). Data is transmitted every 15 minutes ensuring real-time monitoring of your tank. The portal has ability to view historical data and set up various alarms for managing min/max limits.

3. Full Inventory Control

The system provides level, density and mass analysis in real-time to within 0.5% accuracy to ensure you control your inventory in the best possible way with minimal waste or losses.

SENSOR INTERFACE:

Sensor Interface Device – when a reference sensor and/or pressure sensor is required.

For applications where the liquid changes, such as brewery and distillation applications, this will require a reference ultrasonic sensor fitted to the side of the tank. In this instance, our Sensor Interface Device (RL-017) will be required.

For applications where pressure is also required to be measured, such as in LPG, our Digital Pressure Gauge will integrate seamlessly with the RotoLevel LT. In this instance, our Sensor Interface Device (RL-017) will also be required.

The interface device allows for up to two ultrasonic sensors, one pressure sensor and one temperature sensor to be integrated and routed through the RotoLevel LT device. This data is then routed to our RotoHub device and transmitted via 3G/4G to our Data Portal.

