

RM140 Overfill Protection Rack Monitor

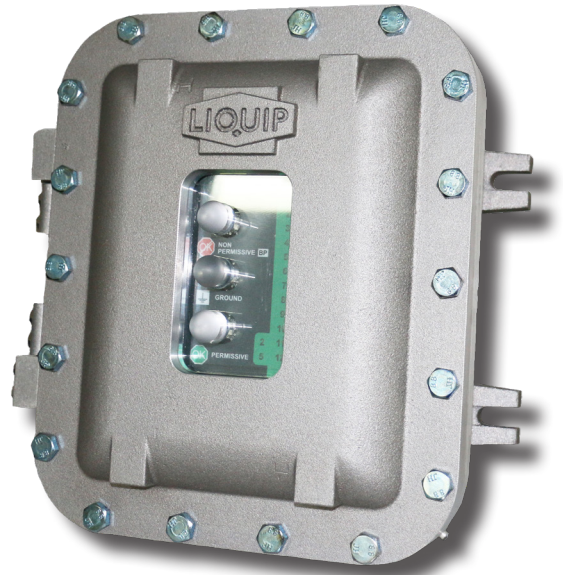
Overfill protection and grounding monitor for truck or rail loading in petro-chemical applications.

Built to function with all probes designed to the API code: API RP 1004 and the EU Standard EN13922, the RM140 Series is the world's most flexible and adaptable monitor.

The RM140 provides a fail-safe, state-of-the-art overfill protection and grounding monitoring system that is compatible with all commonly used overfill protection and grounding systems.

Key Features

- Automatic sensing of 2-wire/thermistor or 5-wire overfill systems, no manual switching or inspection required
- Supports up to (8) 2-wire/thermistor probes and up to (12) 5-wire probes
- High-output display visible in direct sunlight, provides flexibility for indoor/outdoor use
- Coded wireless by-pass key for secure and reliable operation
- Self-test at start up/continuous self-monitoring, ensures safety throughout the loading process
- Separate grounding and overfill control outputs
- Compact and functional design is easy to install, perfect for tight spaces or crowded work areas
- Global electronic compatibility, able to operate on almost any electric service
- RM140 series is directly compatible with PD100 Probe Doctor as a "plug-in replacement"
- Rack monitor electronics mounted in a 100mm (4") deep flameproof enclosure.






Liquip RM140 shown

Ordering Information

- RM140 - Overfill and Ground Verification Rack Monitor.

Certification & Compliance

- Type of Protection: Explosion-proof enclosure for Group II, Zone 1, Ex d [ia]
- IEC Certificate: IECEx TSA 05.0049X
Marking: Ex db [ia Ga] IIB T6 (-20°C ≤ Tamb ≤ +70°C) IP66
- ATEX Certificate: DEMKO 06 ATEX 140833X
Marking:  II 2 (1) G Ex db [ia Ga] IIB T6 Gb (-20°C ≤ Tamb ≤ +70°C) IP66
- UKEX Certificate: UL21UKEX2154X
Marking:  0518  II 2 (1) G Ex db [ia Ga] IIB T6 Gb (-20°C ≤ Tamb ≤ +70°C) IP66

- EU Directives:

ATEX Directive 2014/34/EU
EMC Directive 2014/30/EU
RoHS 3 2015/863

- FM Approval:
Marking:



FM Approved for US and Canada.
Explosion proof with I.S. Outputs
Intrinsically Safe Sécurité
Intrinsèque Exia
Class I, Division 1, Group C & D, T6
Ta = -25°C to 60°C

RM140 Overfill Protection Rack Monitor

Electrical

Power	240V Operation	110V Operation
Minimum Input Voltage:	185VAC	85VAC
Maximum Input Voltage:	275VAC	135VAC
In-rush Current:	2.2A	2.3A
Maximum Current:	400mA	400mA
Normal Power Consumption:	8.6W (No probe) 20W (8x 2-wire probes)	8.6W (No probe) 20W (8x 2-wire probes)
Mains Power Fuse Rating:	250V, 400mA anti-surge 1500A Breaking Capacity	250V, 400mA anti-surge 1500A Breaking Capacity

Intrinsically Safe Signals

Nominal Voltage:	10.5V, 13.02V Max
Nominal Current:	116mA, 121mA Max
Relay Outputs:	1 x Overfill Monitoring Relay 1 x Ground Monitoring Relay
Relay Contacts:	Common, Normally Open, Normally Closed
Maximum Contact Voltage:	250VAC
Maximum Contact Load:	5A (resistive), 2.5A (inductive)
Relay Fuse Rating:	250V @ 5A anti-surge

Mechanical

	Standard	Metric
Width	12.8"	324mm
Height	13.4"	340mm
Depth	6.7"	170mm
Weight	36.37 lb	16.5 kg
Material	Aluminium Housing Base and Cover, Laminated Glass Window	

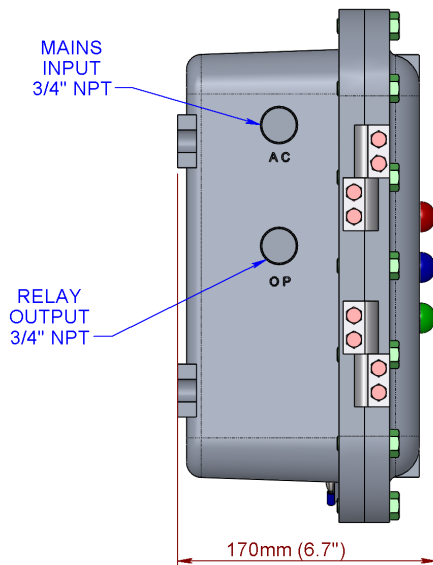
Parts & Accessories

Part Number	Description	Part Number	Description
6987	Fuse 400mA, 250VAC anti-surge, 1500A Breaking Capacity	TPA3	3 Bayonet Gantry Plug Parking Adaptor
5542	Fuse 5A @ 250VAC anti-surge	TPA4	4 Bayonet Gantry Plug Parking Adaptor
6985	RM100 Safety Ground Harness	JB100	Junction Box with 2 Threaded Gland Entries
RM100-3	RM100 Aluminium Safety Barrier	JB103	Junction Box with 3 Threaded Gland Entries
RM100-4	RM100 Polycarbonate Terminal Cover	HTA204	2-wire Optical Hand Tester
RM100-5K	RM100 PCB Assembly Complete Kit (RM100-5 + 6959 Display)	HTA503	5-wire Optical Hand Tester
6959	RM100 display PCB Assembly	EAC201	Earth Clamp with Straight Cable
GP103	3 Bayonet Gantry Plug with Coiled Cable	EAC202S	Earth Clamp with Coiled Cable
GP104	4 Bayonet Gantry Plug with Coiled Cable	LDP202	2-wire Level Detection Probe
GP204	4 Bayonet Gantry Plug screened Straight Cable	LDP205	5-wire Level Detection Probe
GP204U	4 Bayonet Gantry Plug screened Straight Cable, Complies with EN13922	6983	RM140 Bypass FOB

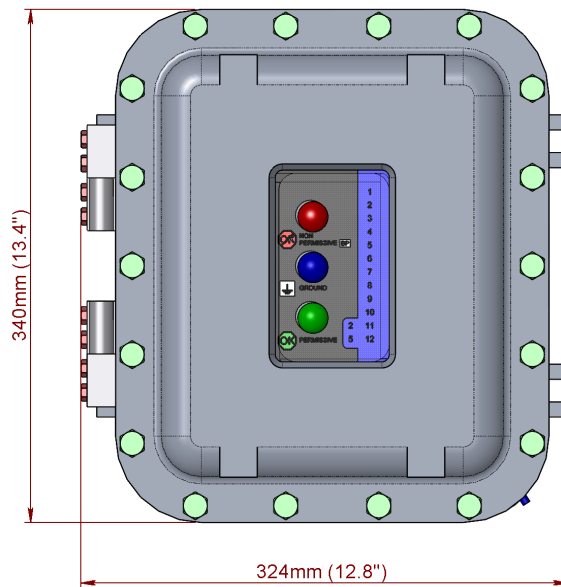
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Dimensions

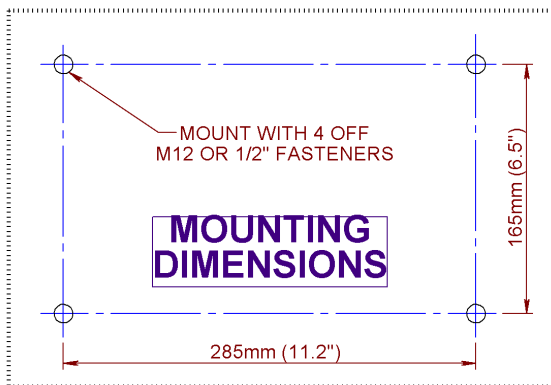
RM140 SERIES RACK MONITOR



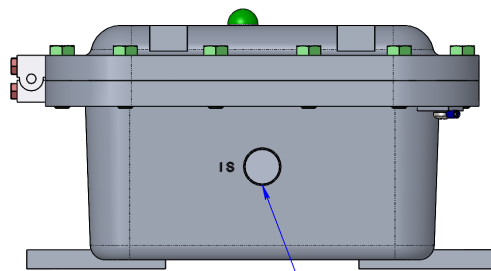
SIDE VIEW



FRONT VIEW



MOUNTING DIMENSIONS



PROBE OUTPUT 3/4\" NPT

BOTTOM VIEW

METERS - VALVES - VENTS - MANHOLES - HOSEREELS - OVERFILL PROTECTION - LOADING ARMS - ELECTRONIC DIPSTICKS



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