

# MonoScan®

## Ultrasonic Continuous Level Measurement Device for Liquids, Solids and Open Channel Flow

**More compact. More reliable. More value.**

Deploying breakthrough, patented technology, MonoScan assures accurate measurements even under changing conditions. This self-calibrating product represents a unique combination of strength, performance and value.



### More flexibility. More compatibility

MonoScan® is an excellent choice for measuring liquid and solid levels at ranges of up to 15 meters, with a 0.25% accuracy of measuring range. The MonoScan® single enclosure and compact sensor, ensures a full match with your installations.

Moreover, the MonoScan is the smallest ultrasonic gauging device for measuring open channel flow, incorporating 9 predefined types of weirs and flumes in its memory that assures fast and easy set-up.

### Communications and Control

MonoScan® includes optional digital communication via RS 485 – Modbus and compatibility with HART protocol. It can control different devices through its three SPDT relays.

### Advantages

- Direct installation on tanks, vessels and reactors
- Self-calibration to virtually all types of conditions
- Full compensation in virtually all environments
- Delivers highest accuracy even under harsh conditions
- Maintenance-free

### Applications

- Chemical processes
- Petrochemicals
- Food & Beverage industries
- Water & Waste water
- Pharmaceuticals
- Pulp & Paper industries
- Plastics



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# Data Sheet MonoScan<sup>®</sup>, MonoScan485<sup>®</sup>

## MonoScan (2W)



## MonoScan485 (4W)



Applications	Liquid, Solid, Open Channel Flow	Liquid, Solid, Open Channel Flow
Measuring Ranges	Liquids and Flow Short-Range: 0.2-5m (0.6-16 ft) Standard-Range: 0.6-15m (1.9-49 ft) Solids – Short-Range: 0.2-5m (0.6-16 ft) Standard-Range: 0.6-8.5m (1.9-28 ft)	Liquids and Flow Short-Range: 0.2-5m (0.6-16 ft) Standard-Range: 0.6-15m (1.9-49 ft) Solids – Short-Range: 0.2-5m (0.6-16 ft) Standard-Range: 0.6-8.5m (1.9-28ft)
Measurement Accuracy	0.25% of measuring range	0.25% of measuring range
Resolution	3 mm (0.11 inch)	3 mm (0.11 inch)
Power Supply	12-28VDC (0.1A surge)	12-28VDC (0.1A surge); 100-240 VAC 50/60 Hz 30 mA
Load	750 ohm @ 28VDC	750 ohm @ 28VDC
Current Output	4-20mA loop	4-20mA
Mounting Option	2" NPT/2" BSP	2" NPT/2" BSP
Temperature Range	-40°C to +70°C (-40°F to +158°F)	-40°C to +70°C (-40°F to +158°F)
Ambient Compensation	Integral	Integral
Housing Type	Integrated (Mono-Block)	Integrated (Mono-Block)
Housing Material	ABS + UV	ABS + UV
Enclosure Rating	IP 65	IP 65
Beam Angle	5° @ 3db point	5° @ 3db point
Sensor Type	25 KHz	25 KHz
Operating Temp'	-40°C to +70°C (-40°F to +158°F)	-40°C to +70°C (-40°F to +158°F)
Sensor material	Stainless Steel 316L or Coated Aluminum	Stainless Steel 316L or Coated Aluminum
Sensor Housing	PP/PVDF	PP/PVDF
Display	LCD (4 digits– 7 segments)	LCD (4 digits – 7 segments)
Communication	N/A	RS485
Interface	N/A	Modbus-RTU, HART*
Relays	N/A	3 SPDT
Trigger Points	N/A	6 Points
Weight	Up to 1.4 Kg (3.08 lb)	Up to 1.4 Kg (3.08 lb)
Enclosure Dimensions	289mm x 107mm x 85mm	289mm x 107mm x 85mm
Certifications*	CE - EMC ATEX: EX ia IIC T4 FM: Class I Division 1 Group A T4 CSA: Class I, II, III, Group A,B,C,D,E,F and G	CE - EMC ATEX: EX ia IIC T4 FM: Class I Division 1 Group A T4 CSA: Class I, II, III, Group A,B,C,D,E,F and G

\* Consult factory for availability

