Mono*Scan*®

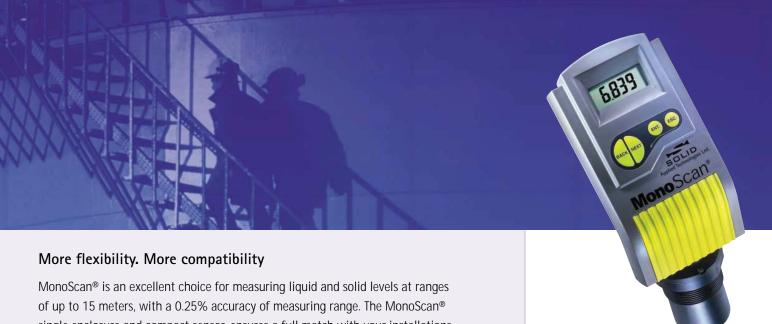## Ultrasonic Continuous Level Measurement Device
for Liquids, Solids and Open Channel Flow

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

SOLID
Applied Technologies Ltd.

	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