

SmartScan®

Ultrasonic Non Contact, Continuous Level Measurement

Gauges for Liquids, Solids and Open Channel Flow

SmartScan® 25 and SmartScan® 50 are non-contact, continuous ultrasonic level measuring devices for installation in various types of tanks and vessels. Drawing on patented technology. The SmartScan products deliver automatic temperature compensation for vapors, gases and wind to provide the highest accuracy.

Self-calibrating and virtually immune to changing conditions, SmartScan products provide a unique combination of strength, performance, and value.



Advantages

- Highly cost effective solution
- Fast set-up time saves installation cost
- Reliable operation
- Reduced stock inventory
- Efficient control and management of processes utilizing internal smart relays
- Easy installation saves time and cuts down costs
- Single source for a complete product line

Main Features

- Applicable for liquids, solids and open channel flow measurement
- Up to 40 meters Long rang measurements with high accuracy
- Very light weight and compact sensors
- Automatic temperature compensation
- Extensive software package including total flow, volume and paper roll diameter measurement options
- 5 independent SPDT relays
- Available as a single-sensor or a multi-sensor unit with two or three sensors and level difference
- Patented technology enables low energy and power consumption
- Zero calibration and zero maintenance

Applications

Chemical processes
Petrochemicals
Food · Beverage
Water · Wastewater
Pharmaceutical
Pulp · Paper
Plastics
...and more



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Data Sheet SmartScan® 25 · 50

Model

SmartScan 25

SmartScan 50

Applications

Liquid, Solid, Open Channel Flow

Liquid, Solid, Open Channel Flow and Paper Roll Diameter

Measuring Ranges

Liquids. Flow

Standard Range: 0.6 - 25 m (2 - 82ft)
Long-Range: 0.6 - 40 m (2 - 131ft)

Solids

Standard Range: 0.6 - 20 m (2 - 65.6ft)
Long-Range: 0.6 - 30 m (2 - 98ft)

Liquids. Flow

0.4 - 12 m (1.3 - 39.4 ft)

Solids

0.4 - 8.5 m (1.3 - 28 ft)

Diameter

0.5 - 2.5 m (1.6 - 8.2 ft)

Measurement Accuracy

SmartScan 25L, 25S, 250 -
0.25% of measuring range

SmartScan 50L, 500 - 0.2% of measuring range
SmartScan 50S - 0.25% of measuring range
SmartScan 50D - 0.1% of measuring range

Resolution

1 mm (0.04 inch)

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Power Supply

24 VDC (0.25A max); 100-240 VAC, 50/60Hz, 70mA Max.

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Load

750 ohm @24VDC

750 ohm @24VDC

Current Output Range

4-20mA

4-20mA

Housing Type

Two Parts

Two Parts

Housing Material

ABS + UV

ABS + UV

Mounting Option

1" BSP/NPT, 2" BSP/NPT (depend on sensor)

1" BSP/NPT

Temp' range

-40°C to +60°C (-40°F to +140°F)

-40°C to +60°C (-40°F to +140°F)

Ambient Temperature Compensation

Integral

Integral

Enclosure Rating

IP 67/ IP 65

IP 67/ IP 65

Beam Angle

5° @ 3db point

5° @ 3db point

Sensor Type

25 KHz

50 KHz

Sensor - Operating Temp'

-40°C to +80°C (-40°F to +176°F)

-40°C to +100°C (-40°F to +212°F)

Sensor Material

Stainless steel, Coated Aluminum

Glass reinforced Epoxy

Sensor Housing

PP (PVDF: optional)

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Display

LCD (6 digits)

LCD (6 digits)

Communication

RS485/ RS232

RS485/ RS232

Interface

Modbus*, HART*

Modbus*, HART*

Relays

5 Independent SPDT

5 Independent SPDT

Relays Trigger Points

10 Points

10 Points

Enclosure Weight

1.1 Kg (2.4 lb)

1.1 Kg (2.4 lb)

Sensor Weight

Up to 0.4 Kg (depends on the range) (0.88 lb)

0.5 Kg (1.1 lb)

Enclosure Dimensions

246 mm x 200mm x 84mm

246 mm x 200mm x 84mm

Sensor Dimensions

Up to 143.7mm x 70mm x 84.7mm

124 mm x 71 mm x 65 mm

Extension Cable Length

Up to 200 m (656 ft.)

Up to 200 m (656 ft.)

Certifications

CE, FCC, CSA*, FM*, ATEX

CE, FCC, 3A, CSA*, FM*, ATEX*

* Consult factory for availability



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Specifications are subject to change without notice

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