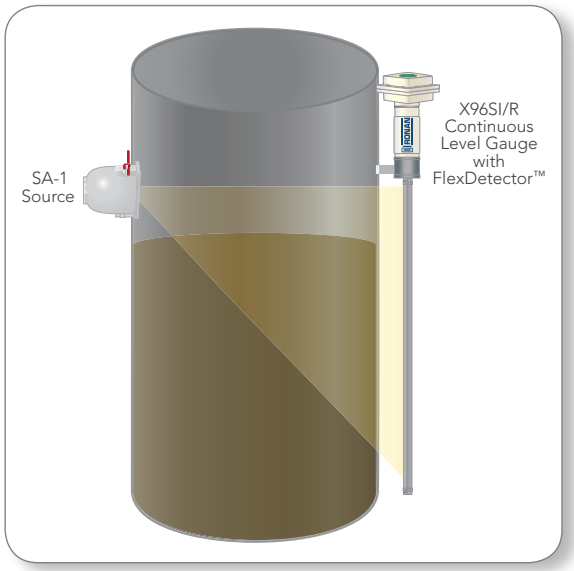
RONAN
ENGINEERING COMPANY
MEASUREMENTS DIVISION

Ronan Measurements Division supplies the process control industry with leading-edge Radiometric Measurement Systems that provide non-contact measurement solutions for the harshest environments.

CONTINUOUS LEVEL MEASUREMENT WITH THE X96SI/R RADIOMETRIC TRANSMITTER

Ronan's Radiometric Continuous Level Measurement System utilizing the X96SI/R Transmitter accurately measures liquids or solids contained in a vessel, even in the most complex processes.

Radiometric Measurement provides a safe and efficient, non-contact method to measure liquids or solids in industries including Mining and Aggregates; Power; Refining, Oil and Gas; Chemical; Metals; Pulp and Paper; Dredging; Cement; and Food and Beverage where materials to be measured are caustic or corrosive, abrasive or highly viscous, held at extreme temperatures or under high pressure, in a process flow that is violent or constantly changing, or contained in a vessel with an internal obstruction. A Radiometric Measurement System consists of a gamma source and holder, a detector and a transmitter. The entire system mounts externally to the vessel or pipe and can be easily installed and maintained while the process is running without downtime, vessel modifications, risk of accidental release, or the need for specialty construction materials.



X96SI/R Radiometric Transmitter

The new X96SI/R integrally-mounted transmitter includes a patented optical coupling that allows the transmitter and detector electronics assembly to be easily mounted to any detector configuration. The transmitter can also be remotely mounted in the field or control room. Fully Ethernet capable, configurations, software updates, and data logging can be completed easily through the user's PC using a standard web browser. The X96SI/R is available in explosion proof, weatherproof or stainless steel housing. The system is backward-compatible to enable you to easily upgrade existing systems to newer transmitter technology. State-of-the-art transmitter-based electronics provide precision gauging. The system is menu-driven for simple programming. Built-in intelligence provides a range of features including:

- Automatically compensates for vapor density changes, foam or gasses, process build-up
- Automatic source decay compensation
- Auto calibration
- Radiation discrimination
- State of the art dynamic tracking of process fluctuations
- Data logging and event recording
- Adjustable time constant
- Empty pipe alarm

X96SI/R Radiometric Transmitter

Florence, KY 41042 USA - 859.342.8500 - www.ronanmeasure.com - sales@ronanmeasure.com

X96SI/R Specifications

Performance	
System Accuracy	+/- 1 % span
Outputs	4-20mA HART® 4-20mA, Foundation Fieldbus™ PROFIBUS PA 2 Form "C" Relay Outputs with 1 Isolated Open Collector Outputs Capable of Switching 4.5 to 30 volts – Or – 1 Form "C" Relay Outputs with 3 Isolated Open Collector Outputs Capable of Switching 4.5 to 30 volts
Pressure Input Temperature Input	Support for Process Pressure from 0-10 volts, or 4-20 mA Up to 3 Digital Inputs which can be Configured (Individually, Quadrature, Encoders or Pulse Counters Inputs) Nickel or Platinum RTD
Diagnostics	On-Board Modular Self-Test Watchdog Timer and Status LEDs
Calibration	Available Through Web Browser, PC Based Software or Hand Held Communicator/DCS Utilizing HART® Foundation Fieldbus™ or PROFIBUS PA USB Ethernet RS-232/RS-485 (optional)
Environmental	
Operating Temperature	-10 to +60 C
Electrical	
Power Supply	90-240VAC, 24 VDC @ .035 A
Mechanical	
Construction Housing	NEMA 4 Standard Stainless Steel (optional) Explosion Proof (Optional)
Approvals	
Complies with:	Cenelec/Atex CSA Class 1, Div 1 Groups A,B,C,D Nema 4, Nema 4X

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EXCELLENCE IN MONITORING AND MEASUREMENT