The Probe Ultrasonic level sensing

INTRODUCTION

One of **Radcom's** ultrasonic level monitoring systems is based on the well known Siemens Milltronics "The Probe" Ultrasonic level sensor.

The Probe is available with Intrinsically Safe approval if required for use in Hazardous Areas.

A Radcom data logger can power the ultrasonic probe from internal batteries, and can be supplied with Local or Telemetry communications.

PSTN or cellular GSM communications versions can be configured to alarm out to office PC or mobile phone for action.



Typical Rad Log display showing level monitoring

TYPICAL APPLICATIONS

Sewerage / Storm Level Monitoring

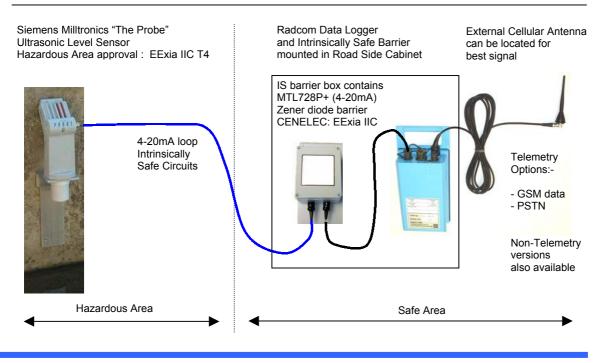
This non contacting ultrasonic Probe is ideal for monitoring sewerage flow or clean water applications in open channels.

Tank Level Monitoring

The ultrasonic Probe can be easily mounted to monitor liquid tank level. The cellular telemetry version can be monitored from the office and easily relocated to another site for survey type applications.

Control Systems

The ultrasonic Probe can be used to control other process plant upstream at great distances using the PSTN or cellular telephone networks.





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TECHNICAL DATA

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Ultrasonic Probe	Ultrasonic Measurement	Measurement Range 0.25 to 5 metre (0.8 to 16.4 ft)
		Resolution 3 mm (0.125"). Built in temperature compensation
		Accuracy in air 0.25% of target range.
		Beam Angle 10 deg at -3dB boundary
		Sonic intelligence echo processing. 4-20mA interface to logger
		Operating temperature -20 to +60°C (-5 to +140°F)
	Probe Physical	Size: 279mm High x mounting 87 dia mm (11"H x 3.5"dia)
		Mounting Thread versions: 2" NPT, 2" BSP or PF2 available
		Probe electronics case: Moulded PVC Senor: Kynar Flex or Tefzel (sanitary model also available)
		Enclosure Type 4X/NEMA 4X/ IP65 Vent to atmosphere
		Intrinsically safe versions available, CENELEC EExia IIC T4 CSA/FM Class I & II, Div 1 Group A,B,C,D,E,F &G SAA. EX ia IIC T6 IP65 approvals
		Probe weight: 1.5 Kg excluding bracket
Logging Features	Logger Inputs	Logger battery provides 4-20mA power for Ultrasonic probe
	Memory	Primary recording 48,720 readings (MultiLog) (memory expandable to 245,280 readings on request) Can read continuously (cyclic mode) or period of time (block).
	Sampling Rate	5 minutes, 10 minutes, or 15 minutes
	Alarms	Level exceedance Alarms. Each alarm out comment field 16 characters. Up to 16 alarm out telephone numbers
	Logger ID	Up to 8 alphanumeric characters
	Site ID	Up to 127 alphanumeric characters.
	Clock	On board 24 hour real time clock with date facility.
Communications	Serial	RS232 by MIL connector for connection to laptop PC, desktop PC Programmable upto 19,200 Baud.
	PSTN modem	2,400 Baud Optional PSTN land line internal modem (optional)
	Cellular GSM	9,600 Baud 2-way Cellular GSM internal modem (optional)
Logger Physical	Dimensions	250H x 175W x 90D mm (9.9"H x 6.9"W x3.6"D) Multi Log GSM
	Construction	Die-cast aluminium enclosure, powdercoat spray painted
	Weight	4.5 Kg (9.9 lb) Multi Log GSM
	Operating temperature	-20 to +70°C (-5 to +160°F)
	Ingress protection	Logger IP68 submersible
	Power	Lithium-ion cell operational for 1.5 years under normal operation.

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Due to our policy of continuous product development Radcom reserves the right to change specifications without notice.