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BinMaster Introduces SmartSonic...a Full Range of Ultrasonic Level Transmitters

SmartSonic is for continuous non-contact level measuring and monitoring of tanks, bins, and silos. The SmartSonic system features a variety of ultrasonic transmitters and broad processor capabilities that provide remote display and full communication solutions. This plug-and-play design allows us to build a solution that matches your exact needs and is fully scalable for future expansion.

An ultrasonic pulse is generated by the transmitter and is sent in the direction of the product in a vessel. The pulse reflects off the product and returns to the sensor in the form of an echo. The transmitter can be programmed to simply send a 4-20 mA analog output or send data to a PC running a SmartSonic's calibration/data logging program using RS-485 communications.

SmartSonic solutions are reliable, flexible, and easy to use. The range of transmitters allows you to read levels from 0.4 to 90 feet in liquid applications and 1 to 45 feet in specific powder and bulk solid applications.

You have bulk-management challenges. We have bulk-management solutions.



General Features

- **Modular Design**
Configurable for a number of transmitters, relays, current loops, PC, and PLC interfaces
- **Various Voltage Options**
Ultrasonic transmitters can be powered with 12 to 30 VDC or 110/230 VAC
- **Push-Button Calibration**
Full and empty tank distance can be set with a simple push of a button
- **Temperature Compensation**
Built-in temperature sensor automatically compensates for temperature changes, ensuring consistent accuracy
- **Optional RS-232/485 Communications**
Interfaces directly to a PC allowing for data collection, parameter changes, and



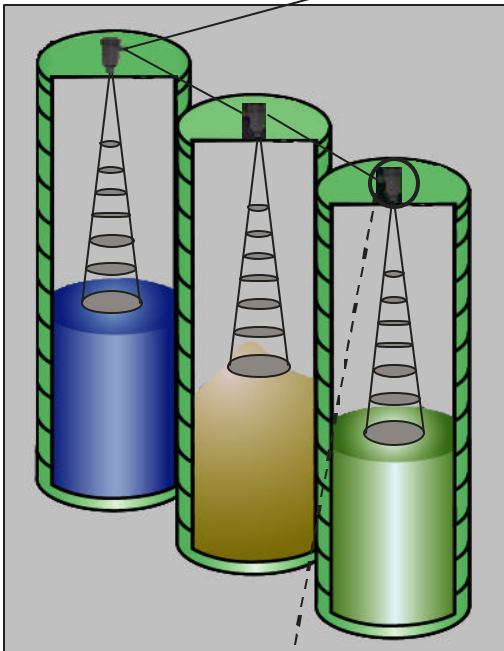
- ◆ Point Level Sensors
- ◆ Inventory Measurement
- ◆ Flow Detection
- ◆ Dust Detection
- ◆ Aeration & Vibration



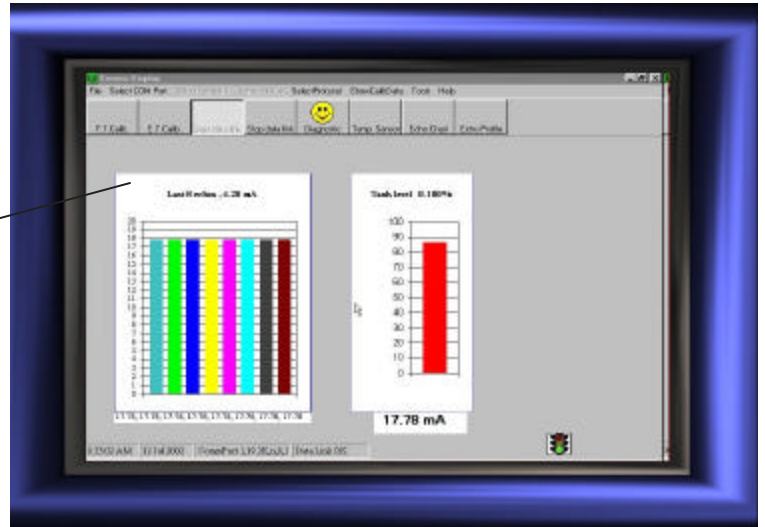
SmartSonic PC Based Software



A single RS-485 data cable connects the PC running SmartSonic software with up to 30 SmartSonic transmitters

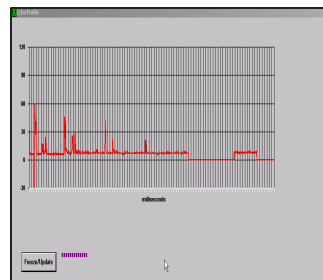


Main PC Screen

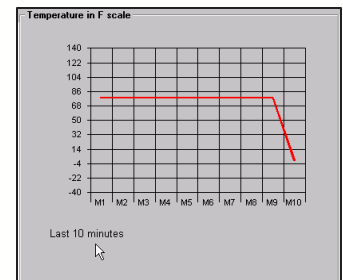


Provides Direct PC Based Inventory Management

Built-in communication with a PC allows storage of the current output and temperature in a data logger. The data logger is linked with Microsoft Excel™. Up to 30 SmartSonic transmitters can be connected using RS-485 communication or a single unit can communicate directly with a PC using RS-232 communication. The SmartSonic software can provide a full diagnostic check including loss of echo, temperature sensor failure, noise error, and other conditions. A user can also see on the computer screen the echo profiles and echo stability chart. From the SmartSonic PC program fixed point and programmable calibrations can be completed.



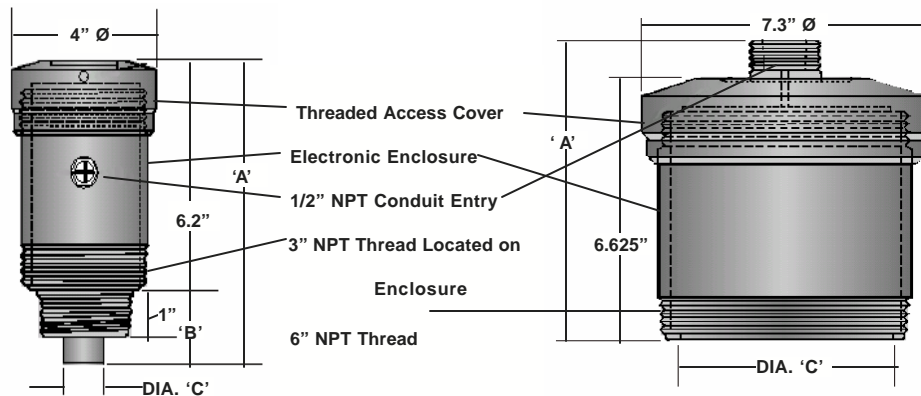
Echo Profile Screen



Temperature Profile Chart

SmartSonic Ultrasonic Level Transmitters

Technical Specifications

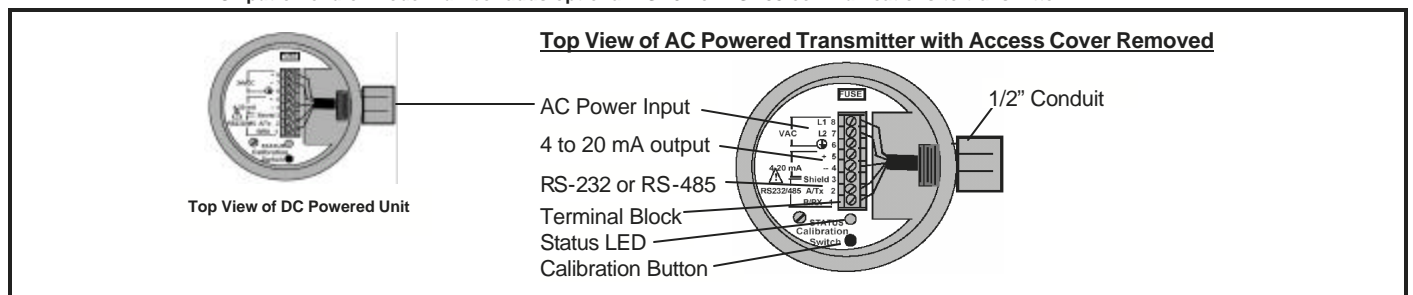


Models SS300/400-45U,52U,70U,80U,81U,and 148U

Model SS300/400-25U Only

	MODEL	RANGE	RESOLUTION	OPERATING FREQUENCY	MOUNTING	DIMENSION 'A'	DIMENSION 'B'	DIMENSION 'C'
110/230 VAC—4 Wire	SS400-25U	1.4-90 ft 0.40-27.4 m	0.41" 10 mm	25 KHz	6.0"/1.0" NPT	7.625"	N/A	5.75"
	SS400-45U	1.0-60 ft 0.30-18.2 m	0.19" 5 mm	45 KHz	3.0" NPT	8.9"	3.0"	3.0"
	SS400-52U	0.9-50 ft 0.27-15.2 m	0.16" 4 mm	52 KHz	3.0" or 2.0" NPT	9.3"	3.05"	2.2"
	SS400-70U	0.8-30 ft 0.24-9.1 m	0.12" 3 mm	70 KHz	3.0" or 2.0" NPT	8.5"	2.25"	1.8"
	SS400-80U	0.7-20 ft 0.21-6.1 m	0.08" 2 mm	80 KHz	3.0" or 2.0" NPT	8.5"	2.25"	1.8"
	SS400-81U	0.6-16 ft 0.18-4.9 m	0.08" 2 mm	81 KHz	3.0" or 1.5" NPT	8.4"	2.1"	1.5"
	SS400-148U	0.4-9 ft 0.12-2.7 m	0.04" 1 mm	148 KHz	3.0" or 1.0" NPT	8.25"	2.0"	1.1"
12 to 30 VDC—3 Wire	SS300-25U	1.4-90 ft 0.40-27.4 m	0.41" 10 mm	25 KHz	6.0"/1.0" NPT	7.625"	N/A	5.75"
	SS300-45U	1.0-60 ft 0.30-18.2 m	0.19" 5 mm	45 KHz	3.0" NPT	8.9"	3.0"	3.0"
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"C" put on end of model number adds optional RS-232 or RS-485 communications to transmitter



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Introducing a Cost Effective and Reliable Family of Ultrasonic Level Transmitters



Features

- **Power control operation in transmitter**
- **Easy two point push-button calibration**
- **Output 4 to 20 mA signal**
- **Built-in temperature compensation**
- **Optional RS-232 or RS-485 communications**
- **Logarithmic receiver with very high dynamic range**
- **Uniform polar pattern**

We're on the web
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BINMASTER
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