



FEATURES AND BENEFITS

- Compact transducer with integral controller and display
- Simple installation
- Penetrates dust clouds caused by pneumatic filling
- Power relay output for alarm and control
- Measures up to 98 feet
- Narrow 5° Beam Angle

The SONO-1000 is a single tank ultrasonic sensor. This unit is a compact ultrasonic transmitter designed to measure the level of free flowing solids such as powders and granules. The SONO-1000 microprocessor is a smart level transmitter that offers a 4-20 mA output, and programmable relay.

This is a level measurement technology that is a non-contact ultrasonic principle which is based on sonar or sound echo principles. The SONO-1000 is especially suited for applications where physical contact with the material being measured is undesirable.

HOW IT WORKS

The SONO-1000 is an ultrasonic level metering technology that is based on the principle of measuring the time required for the ultrasound pulses to make a round trip from the sensor to the level to be measured and back.

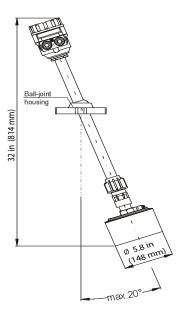
The sensor emits an ultrasonic pulse train and receives the echoes reflected. The intelligent electronic device processes the received signal by selecting the echo reflected by the surface and calculates from the time of flight the distance between the sensor and the surface which constitutes the basis of all output signals of the SONO-1000.

HOW TO ORDER

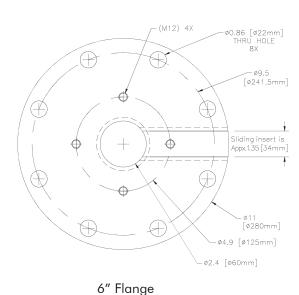
U1-33-A	SONO-1000 AC 4-wire, 98' (30 m) range, 85 to 255 VAC, 4-20 mA	
U1-33-D	SONO-1000 DC 4-wire, 98' (30 m) range, 11.4 to 40 VDC, 11.4 to 28 VAC, 4-20 mA	
STU120100	8" Polypropylene FF ANSI, drilled like 150 psi flange	
STU120101	6" Polypropylene FF ANSI, drilled like 150 psi flange	

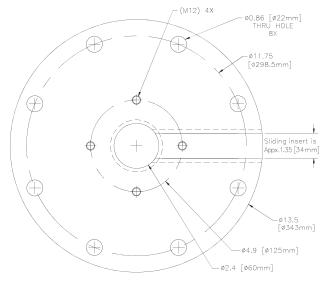
SPECIFICATIONS

FUNCTIONAL	Model U1-33-A	Model U1-33-D		
Power Requirements	85 to 255 VAC	11.4 to 40 VDC, 11.4 to 28 VAC		
Power Consumption	(50/60 Hz) / 6.8 VA	4.1 W, 11.4 to 28 V AC (50/60 Hz) / 4.6 VA		
Operating Temp. Electronics	-22° to 140° F (-30° to 60° C)			
Output Relay	SPDT, 250 V AC / 3 A, non-inductive			
PERFORMANCE				
Maximum Measuring Range	98 ft (30 m)			
Minimum Measuring Range	2 ft (0.6 m)			
Beam Angle	5°			
Pressure Rating	0.7 to 1.1 bar			
Frequency	30 kHz			
Accuracy	\pm 0.2% of the measured distance plus 0.05% of range			
PHYSICAL				
Enclosure Material, Rating	Powder paint coated aluminium, IP67			
Conduit Entries	(2) 1/2" NPT; (2) M20 x 1.5			
Process Connection	8" (343 mm) flange; 6" (280 mm) flange			
Mounting Plate Material	Polypropylene (PP)			
Shipping Weight	15.4 lb (7 kg)			



DIMENSIONS





8" Flange

