



The BULLET

Process Instrumentation

Ultrasonic Level Transmitter Smart Mapping & Explosion Proof

ECHO's newest product THE BULLET provides reliable and accurate measurement of liquid levels. Ultrasonic non-contact technology offers no moving parts that wear, jam, corrode, or get coated like contact technologies. Mapping software makes the effective measuring beam only 3" diameter. No concerns with ladders, pipes, or other tank intrusions in the remaining sound cone. Unit is FM approved explosion-proof making it ideal for use in hazardous locations. The Bullet features easy programming with a 6 digit LCD display and simple menu structure. Window cover allows easy viewing of display. Failsafe output options and diagnostic capabilities make the Bullet a good choice for tough applications.



SPECIFICATIONS:

Service:	Compatible fluids. Not for use with powder and bulk solids.
Wetted Materials:	Sensor: PVDF; process connection: 303 SS.
Ranges (2 versions):	7m = 24.6' (7.5m), 10m=32.8' (10m)
Accuracy:	±0.2% of maximum range.
Resolution:	0.079" (2 mm).
Near Blanking:	8" (20cm).
Beam Diameter:	3" (7.6 cm) diameter.
Temperature Limits:	Ambient: -40 to 140°F (-40 to 60°C), Process: -4 to 140°F (-20 to 60°C).
Temp. Compensation:	-40 to 140°F (-40 to 60°C)
Pressure Limits:	30 psi (2 bar) up to 25°C (77°F). Above 25°C (77°F), rating decreases 1.667 psi per 1°C increase.
Power Requirements:	18 to 28 VDC (2 wire).
Output Signal:	4 to 20 mA or 0-20mA
Max. Loop Resistance:	250 Ohms at 24 VDC.
Electrical Connections:	Screw terminal.
Conduit Connection:	1/2" NPT female (two) or optional M20.
Process Connection:	2" NPT male or optional BSP
Enclosure Rating:	Weather-proof meets NEMA 4X, explosion proof rated Class I, Div. 1, Groups B, C, D; Class II/III, Div. 1, Groups E, F, G.
Mounting Orientation:	Vertical
Failsafe:	On lost echo after 30 seconds, user selectable to 4, 20, 21, 22 mA or last signal.
Memory:	Non-volatile.
Display:	6 character LCD
Units:	In, cm, ft, m, percent.
Programming:	4 button.
Weight:	4.0 lb (1.8 kg)
Agency Approvals:	CE, FM.

