

UltraPro® 500 Series

Ultrasonic Continuous Level Transmitter



Features

- ✓ Up to 0.15% Accuracy
- ✓ Small Dead-Band
- ✓ Simple Programming | Under 2 minutes
- ✓ Loop Powered | 2 Wire 4-20mA Output
- ✓ Explosion Proof | Class 1 Div 1
- ✓ Available Field Adjustable Set-Points
- ✓ Up to 60 ft | 20m Measuring Range

Optional Local Display

- ✓ Local LED Display
- ✓ No Programming
- ✓ Loop Powered
- ✓ Field Mount



- ✓ 2 Button Programming | Field Adjustable
- ✓ Narrow Beam Technology
- ✓ No Programming FOB | PC Required

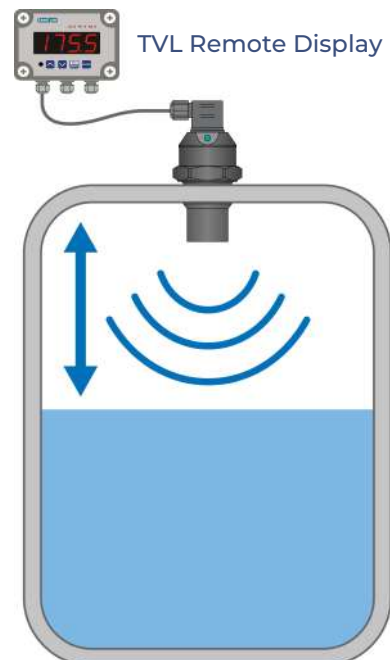
Product Description

The UltraPro® 500 Series Ultrasonic Level Transmitters are 2-Wire loop powered sensors designed to provide reliable and accurate continuous liquid level measurement.

The UltraPro® 500 Series are very reliable and offer both 4-20mA analog output with HART protocol or RS-485 Modbus. Some key applications for the UltraPro 500 include: Chemical Storage Tanks, Waste Sumps, Bulk Storage, Tanker Trucks, Day Tanks, Process Tanks, Neutralization Tanks, and Wastewater applications.

The UltraPro® 500 Series are designed to work with most types of remote instrumentation such as remote displays and remote monitoring solutions.

Working Principle



Specifications

Operating Range	0.1 to 65 ft	0.03 to 20m
Resolution	<1mm 0.04"	
Accuracy	1m 0.2% 2m 0.15% 6m 0.15% 10m 0.2% 20m 0.2%	
Temperature Error	Max 0.04% K	
Max Overpressure	0.1MPa	
Beamwidth	Size Dependant	
Measuring Period	1m{0.5s} 2m{0.5s} 6m{1.2s} 10m{1.2s} 20m{5s}	
Max.Current Output Load	@ U = 24VDC Rmax = 270 @ U = 22VDC Rmax = 180 @ U=20VDC Rmax = 90	
Delay Between Rise Time	1m{5s} 2m{5s} 6m{5s} 10m{9s} 20m{9s}	
Min. Voltage Load	Rmin > 1kΩ	
Enclosure Rating	NEMA 4X IP67	

Operating Temperature

PVDF	-22°F to 158°F	-30°C to 70°C
ABS	32°F to 140°F	0°C to 60°C

Materials

Sensor Body	PVDF
O-Rings	FKM
Housing	ABS

Electrical

Output	4-20mA (Limit values 3.9 - 20.5mA), HART RS-485 with protocol Modbus RTU	
Supply Voltage	18 to 36 VDC ±10% regulated	
Supply Current	4-20mA Max 22mA	0 - 10V (limit values 0 - 10.2V)

Standards and Approvals

CE FCC
RoHS Compliant

Model Selection

Connection	Range	Part Number
3/4" Threaded	1m 3.3ft	UPS-500-01
1" Threaded	2m 6.6ft	UPS-500-02
1 1/2" Threaded	6m 19.7ft	UPS-500-06
2 1/4" Threaded	10m 32.8ft	UPS-500-10
3" Flanged	20m 65.6ft	UPS-500-20

