

Ultrasonic Applications



Liquid Level Monitoring

To monitor stable liquids with no gases or volatile surfaces. Pick a sensor with the range for your application. This will determine the frequency of your sensor. For corrosive applications the transducer material can be chosen that is compatible with the liquid.

Solid Material Level Monitoring

To monitor solid material; the lower operating frequency helps to penetrate dusty the atmosphere found in solids level storage vessels, tanks and bins. They are usually larger in size and require the larger and more powerful transducers for reliable measurement.

High Temperature Applications

To monitor applications with elevated temperatures sensor material selection is important. Special sensor design with thermal isolation is required. Temperature in environment does not effect the ABM sensors performance, because of special and innovative construction of the sensor's drivers.

Sanitary / Hygienic Applications

For sanitary applications ABM provides continuous ultrasonic sensors with 1.5" and 2" tri-clamp mounting. For the food industry the sensor must withstand steam cleaning or clean-in-place (CIP), be quickly removable, and easy to re-install. For high pressure and/or temperature applications, the sensors are available with custom stainless steel transducer.

Remote Monitoring Applications

Remote non-contact ultrasonic level sensors have a built-in cellular modem for remote communication and ABM support. Continuous power and battery or solar panel power (wireless) options are available.

Fast Response Applications

Monitoring fast moving objects is possible with the revolutionary fast response protocol design. ABM ultrasonic sensors measure 10-30 echoes per second, allowing for measurement of any solid material profile.

Liquid-Solid Interface Detection

Monitoring the interface between liquids and solids using the submersible ultrasonic level sensor matched to water. The sensor can be used to monitor the sand, sludge or sediment level at the bottom of the tank or pond.

Ultrasonic Level Sensors and Switches

ABM's ultrasonic technologies are applied to non-contact continuous level sensors matched to air, submersible continuous level sensors matched to water and non-invasive point level switches.

Non-Contact Ultrasonic Level Sensors and Mini Ultrasonic Level Transmitters

An ultrasonic pulse is transmitted from the sensor. The pulse travels through air to the surface being monitored and is reflected off the surface back to the sensor. The time-of-flight is divided by two, corrected with temperature, and converted to an output signal directly proportional to the material level.

Ultrasonic is the ideal solution for measuring the level of liquids or solids without gases or vapours such as CO₂, CO, H₂S, H₂. Select a mini ultrasonic model for short range liquid applications measuring small tanks, drums, totes, barrels or weirs.

Family	Application	Maximum Range	Frequency	Temperature	Pressure	Transducer	Mounting
UL-LIQ	Liquids	Up to 100 ft (30.5 m)	25, 45, 52, 70, 80, 81 or 148 kHz	-40 to 60°C (-40 to 140°F)	≤ 2 Bar (29 psi)	PVC or Teflon	1" - 6" NPT
UL-SLD	Solid Material	Up to 100 ft (30.5 m)	25 or 45 kHz	-40 to 60°C (-40 to 140°F)	≤ 2 Bar (29 psi)	PVC or Teflon	1" - 6" NPT
UL-SAN	Sanitary / Hygienic	Up to 30 ft (9.1 m)	70, 80, 81 or 148 kHz	-40 to 130°C (-40 to 266°F)	≤ 5 Bar (72.5 psi)	SS316L	1.5" or 2" Tri-Clamp
UL-HT	High Temperature / Corrosion Resistant	Up to 60 ft (18.2 m)	45, 52, 70, 80, 81 or 148 kHz	-40 to 130°C (-40 to 266°F)	≤ 2 Bar (29 psi)	Teflon	1" - 3" NPT
UL-RM	Remote Monitoring (continuous power)	Up to 60 ft (18.2 m)	45, 52, 70, 80, 81 or 148 kHz	-40 to 60°C (-40 to 140°F)	≤ 2 Bar (29 psi)	PVC, Teflon or SS316L	1" - 3" NPT
UL-RMB	Remote Monitoring (battery or solar panel)	Up to 60 ft (18.2 m)	45, 52, 70, 80, 81 or 148 kHz	-40 to 60°C (-40 to 140°F)	≤ 2 Bar (29 psi)	PVC, Teflon or SS316L	1" - 3" NPT
UL-FR	Fast Response (2-wire loop-powered)	Up to 100 ft (30.5 m)	25, 45, 52, 70, 80, 81 or 148 kHz	-40 to 60°C (-40 to 140°F)	≤ 2 Bar (29 psi)	PVC	1" - 6" NPT
UL-RT	Extreme Temperature	Up to 60 ft (18.2 m)	45, 52, 70, 80, 81 or 148 kHz	-40 to 130°C (-40 to 266°F)	≤ 2 Bar (29 psi)	Teflon (detached)	1" - 3" NPT

Mini Family	Application	Maximum Range	Frequency	Temperature	Pressure	Transducer	Mounting
UM-LIQ	Liquids	Up to 50 ft (15.2 m)	52, 70, 80, 81 or 148 kHz	-40 to 60°C (-40 to 140°F)	≤ 2 Bar (29 psi)	PVC	1", 1.5" or 2" NPT
UM-SAN	Sanitary / Hygienic	Up to 33 ft (10.1 m)	70, 80, 81 or 148 kHz	-40 to 130°C (-40 to 266°F)	≤ 5 Bar (72.5 psi)	SS316L	1.5" or 2" Tri-Clamp
UM-HT	High Temperature / Corrosion Resistant	Up to 50 ft (15.2 m)	52, 70, 80, 81 or 148 kHz	-40 to 130°C (-40 to 266°F)	≤ 2 Bar (29 psi)	Teflon	1", 1.5" or 2" NPT
UM-SB	Short Blanking	Up to 6 ft (1.8 m)	148 kHz	-40 to 60°C (-40 to 140°F)	≤ 2 Bar (29 psi)	PVC	1" NPT

Submersible Ultrasonic Level Sensor

An ultrasonic pulse matched to water is transmitted from the sensor. The pulse travels through water to the surface being monitored and is reflected off the surface back to the sensor. The time-of-flight is divided by two, corrected with temperature and converted to an output signal directly proportional to the material level.

ABM's submersible ultrasonic is ideal for solid layer detection underwater, underwater pump control and interface detection.

Family	Application	Maximum Range	Frequency	Temperature	Pressure	Transducer	Mounting
UMM-LIQ	Liquids	Up to 40 ft (12.2 m)	148 kHz	-40 to 60°C (-40 to 140°F)	≤ 5 Bar (72.5 psi)	Teflon	Clamp

Non-Invasive Ultrasonic Level Switch

The switch emits a short burst of ultrasonic energy. The energy is coupled through a rubber membrane to the tank causing the tank to vibrate. The tank vibrations are detected and analysed by the switch. Based on the vibration patterns the switch is able to detect the presence or absence of liquid inside the tank, directly opposite the switch.

The switch is ideal for non-invasive point level measurement of liquids in plastic or metal tanks.

Family	Application	Frequency	Temperature	Transducer	Mounting
US-LIQ	Liquids	148 kHz	-40 to 60°C (-40 to 140°F)	PVC	Magnetic Flange or Ratchet Strap
US-HT	High Temperature	148 kHz	-40 to 130°C (-40 to 266°F)	Teflon	Magnetic Flange or Ratchet Strap
US-HP	High Pressure / Thick Wall Tanks	148 kHz	-40 to 60°C (-40 to 140°F)	PVC or Teflon	Magnetic Flange or Ratchet Strap

Non-Contact Ultrasonic Level Sensors for Liquid Applications | UL-LIQ



The UL-LIQ ultrasonic level sensor is the ideal solution for liquid level applications without vapours or gases.

Features

- Maintenance-free, non-contact continuous level measurements
- Self-cleaning design, no build-up or condensation on transducer face
- Plug-and-play installation with simple calibration
- Built-in temperature compensation
- 2-wire loop-powered, 3-wire or 4-wire operation
- 4-20 mA / 20-4 mA output standard
- Optional HART, RS232 or RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- PVC, aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



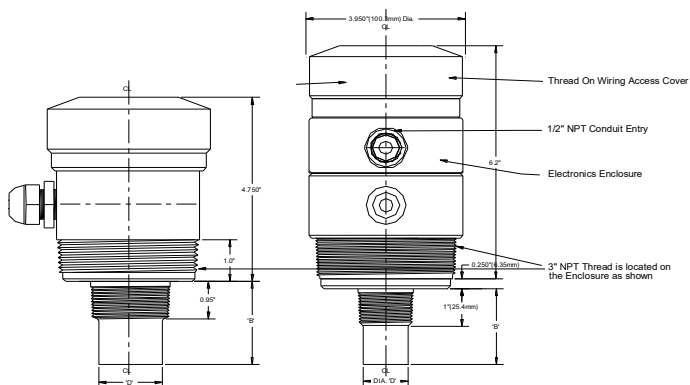
Applications

Liquid level measurement for: Water, Wastewater, Chemical, Food, Beverage and more.

Technical Data	
Measuring Range:	0.4 to 100 ft (0.12 to 30.5 m)
Temperature:	-40 to 60°C (-40 to 140°F)
Pressure Rating:	≤ 2 Bar (29 psi)
Mounting:	1" - 6" NPT

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Loop-Powered (2-wire)	200
	12-30 VDC Power (3-wire)	300
	120 VAC Power (4-wire)	400
	230 VAC Power (4-wire)	430
Maximum Range:	9 ft (2.7 m) - 148 kHz	148
	16 ft (4.9 m) - 81 kHz	081
	20 ft (6.1 m) - 80 kHz	080
	30 ft (9.1 m) - 70 kHz	070
	50 ft (15.2 m) - 52 kHz	052
	60 ft (18.2 m) - 45 kHz	045
100 ft (30.5 m) - 25 kHz	148	
Product Series:	Ultrasonic Sensor	UL
Communication:	HART	CH
	RS232	C2
	RS485	C4
Enclosure:	PVC	PV
	Aluminum	AL
	SS316L	SS
Transducer:	PVC	PVC
	Teflon	TEF

Dimensions



Model:	ABM	-	-	-	UL	-	-	-	-
---------------	-----	---	---	---	----	---	---	---	---

Non-Contact Ultrasonic Level Sensors for Solid Material Applications | UL-SLD



The UL-SLD ultrasonic level sensor is the ideal solution for solid material level applications with dust and steep angle of repose.

Features

- Maintenance-free, non-contact continuous level measurements
- Self-cleaning design, no build-up on transducer face
- Plug-and-play installation with simple calibration
- Built-in temperature compensation
- 2-wire loop-powered, 3-wire or 4-wire operation
- 4-20 mA / 20-4 mA output standard
- Optional HART, RS232 or RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- PVC, aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



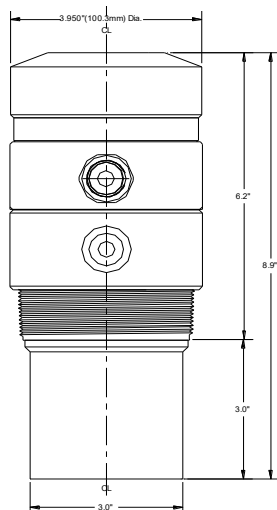
Applications

Solid level measurement for: Plastics, Cement, Animal Feed, and more.

Technical Data	
Measuring Range:	0.4 to 100 ft (0.12 to 30.5 m)
Temperature:	-40 to 60°C (-40 to 140°F)
Pressure Rating:	≤ 2 Bar (29 psi)
Mounting:	1" - 6" NPT

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Loop-Powered (2-wire)	200
	12-30 VDC Power (3-wire)	300
	120 VAC Power (4-wire)	400
	230 VAC Power (4-wire)	430
Maximum Range:	60 ft (18.2 m) - 45 kHz	045
	100 ft (30.5 m) - 25 kHz	025
Product Series:	Ultrasonic Sensor	UL
Communication:	HART	CH
	RS232	C2
	RS485	C4
Enclosure:	PVC	PV
	Aluminum	AL
	SS316L	SS
Transducer:	PVC	PVC
	Teflon (045 only)	TEF

Dimensions



Model:	ABM	- - - -	-	- - - -	UL	- -	-	- -	- - - -
---------------	-----	---------	---	---------	----	-----	---	-----	---------

Non-Contact Ultrasonic Level Sensors for Sanitary Applications | UL-SAN



The UL-SAN ultrasonic level sensor is the ideal solution for hygienic liquid, slurry or solid level applications.

Features

- SS316L transducer face with 1.5" or 2" tri-clamp mounting
- Surface finish exposed to process exceeds a No.4 / dairy finish
- Withstands clean-in-place (CIP) processes with high temp. / pressure upgrade
- Maintenance-free, non-contact continuous level measurements
- Self-cleaning design, no build-up or condensation on transducer face
- Plug-and-play installation with simple calibration
- Built-in temperature compensation
- 2-wire loop-powered, 3-wire or 4-wire operation with 4-20 mA / 20-4 mA output standard
- Optional HART, RS232 or RS485 communications with free calibration, diagnostics and data logging software. PLC compatible (Modbus RTU)
- PVC, aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



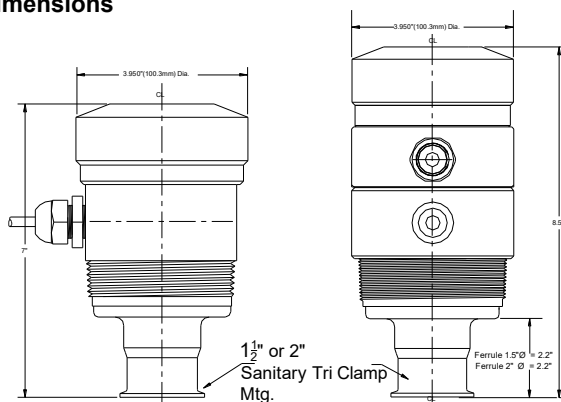
Applications

Level measurement for: Food, Beverage, Pharmaceutical, Water and more.

Technical Data	
Measuring Range:	0.4 to 30 ft (0.12 to 9.1 m)
Temperature:	-40 to 60°C (-40 to 140°F) or -40 to 130°C (-40 to 266°F) with HTP
Pressure Rating:	≤ 2 Bar (29 psi) or ≤ 5 Bar (72.5 psi) with HTP
Mounting:	1.5" or 2" tri-clamp

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Loop-Powered (2-wire) 12-30 VDC Power (3-wire) 120 VAC Power (4-wire) 230 VAC Power (4-wire)	200 300 400 430
Maximum Range:	9 ft (2.7 m) - 148 kHz 16 ft (4.9 m) - 81 kHz 20 ft (6.1 m) - 80 kHz 30 ft (9.1 m) - 70 kHz	148 081 080 070
Product Series:	Ultrasonic Sensor	UL
Communication:	HART RS232 RS485	CH C2 C4
Enclosure:	PVC Aluminum SS316L	PV AL SS
Transducer:	SS316L 1.5" Tri-Clamp SS316L 2" Tri-Clamp	S15 S20
Optional:	High Temperature and Pressure	HTP

Dimensions



Model:	ABM	-	-	-	UL	-	-	-	-	-
---------------	-----	---	---	---	----	---	---	---	---	---

Non-Contact Ultrasonic Level Sensors for High Temperature Applications | UL-HT



The UL-HT ultrasonic level sensor is the ideal solution for liquid level applications in high temperature processes.

Features

- High temperature processes up to 130°C (266°F)
- Maintenance-free, non-contact continuous level measurements
- Self-cleaning design, no build-up or condensation on transducer face
- Plug-and-play installation with simple calibration
- Built-in temperature compensation
- 2-wire loop-powered, 3-wire or 4-wire operation
- 4-20 mA / 20-4 mA output standard
- Optional HART, RS232 or RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- PVC, aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)

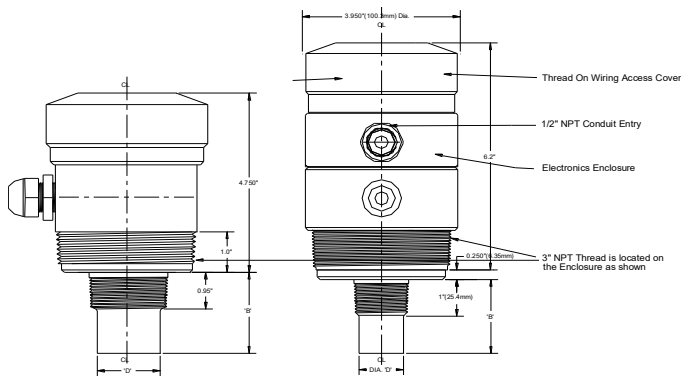


Applications

Liquid and solid level measurement for: Water, Wastewater, Chemical and more.

Technical Data	
Measuring Range:	0.4 to 100 ft (0.12 to 30.5 m)
Temperature:	-40 to 130°C (-40 to 266°F)
Pressure Rating:	≤ 2 Bar (29 psi)
Mounting:	1" - 6" NPT

Dimensions



Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Loop-Powered (2-wire) 12-30 VDC Power (3-wire) 120 VAC Power (4-wire) 230 VAC Power (4-wire)	200 300 400 430
Maximum Range:	9 ft (2.7 m) - 148 kHz 16 ft (4.9 m) - 81 kHz 20 ft (6.1 m) - 80 kHz 30 ft (9.1 m) - 70 kHz 50 ft (15.2 m) - 52 kHz 60 ft (18.2 m) - 45 kHz 100 ft (30.5 m) - 25 kHz	148 081 080 070 052 045 025
Product Series:	Ultrasonic Sensor	UL
Communication:	HART RS232 RS485	CH C2 C4
Enclosure:	PVC Aluminum SS316L	PV AL SS
Transducer:	Teflon	TEF

Model:	ABM	- - -	-	- - -	UL	- -	-	- -	TEF
---------------	-----	-------	---	-------	----	-----	---	-----	-----

Non-Contact Ultrasonic Level Sensors (Continuous Power) for Remote Monitoring | UL-RM



The UL-RM ultrasonic level sensor is the ideal solution for liquid and solids remote monitoring level applications.

Features

- Built-in cellular modem for remote communication and monitoring
- Maintenance-free, non-contact continuous level measurements
- Self-cleaning design, no build-up or condensation on transducer face
- Plug-and-play installation with simple remote setup
- Built-in temperature compensation
- 3-wire operation with 4-20 mA / 20-4 mA output standard
- Sensor Access Website for measurement history, calibration and diagnostics
- Side mount or detached magnetic mount cellular antenna options
- PVC, aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



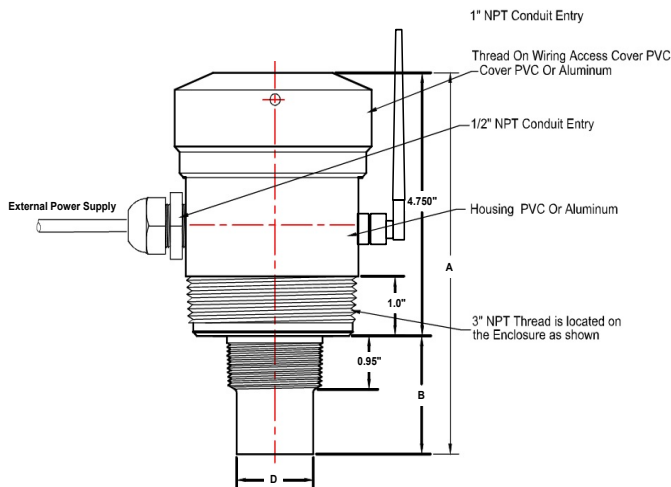
Applications

Level measurement for: Water, Chemical, Cement, Plastic, Environmental and more.

Technical Data	
Measuring Range:	0.4 to 60 ft (0.12 to 18.2 m)
Temperature:	-40 to 60°C (-40 to 140°F)
Pressure Rating:	≤ 2 Bar (29 psi)
Mounting:	1" - 3" NPT

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Power (3-wire)	300
Maximum Range:	9 ft (2.7 m) - 148 kHz 16 ft (4.9 m) - 81 kHz 20 ft (6.1 m) - 80 kHz 30 ft (9.1 m) - 70 kHz 50 ft (15.2 m) - 52 kHz 60 ft (18.2 m) - 45 kHz	148 081 080 070 052 045
Product Series:	Ultrasonic Sensor	UL
Communication:	Cellular Modem	CM
Enclosure:	PVC Aluminum SS316L	PV AL SS
Transducer:	PVC Teflon	PVC TEF

Dimensions



Model:	ABM	300	-	- - -	UL	CM	-	- -	- - -
---------------	-----	-----	---	-------	----	----	---	-----	-------

Non-Contact Ultrasonic Level Sensors (Battery or Solar Panel) for Wireless Remote Monitoring | UL-RMB



The wireless UL-RMB battery powered ultrasonic level sensor is the ideal solution for liquid and solids remote monitoring level applications.

Features

- Battery or solar panel power operation
- Internal or external battery pack options
- Maintenance-free, non-contact level measurements
- Self-cleaning design, no build-up or condensation on transducer face
- Plug-and-play installation with simple remote setup
- Built-in temperature compensation
- Sensor Access Website for measurement history, calibration and diagnostics
- Side mount or detached magnetic mount cellular antenna options
- PVC, aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



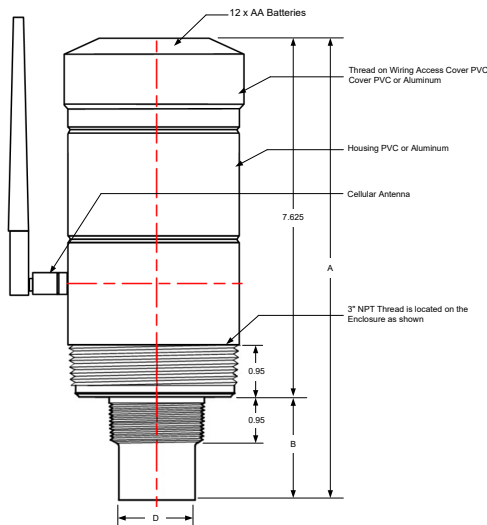
Applications

Level measurement for: Water, Chemical, Cement, Plastic, Environmental and more.

Technical Data	
Measuring Range:	0.4 to 60 ft (0.12 to 18.2 m)
Temperature:	-40 to 60°C (-40 to 140°F)
Pressure Rating:	≤ 2 Bar (29 psi)
Mounting:	1" - 3" NPT

Catalogue Number Ordering		
Supply Voltage:	6-30 VDC Power (Battery)	100
Maximum Range:	9 ft (2.7 m) - 148 kHz	148
	16 ft (4.9 m) - 81 kHz	081
	20 ft (6.1 m) - 80 kHz	080
	30 ft (9.1 m) - 70 kHz	070
	50 ft (15.2 m) - 52 kHz	052
60 ft (18.2 m) - 45 kHz	045	
Product Series:	Ultrasonic Sensor	UL
Communication:	Cellular Modem	CM
Enclosure:	PVC	PV
	Aluminum	AL
	SS316L	SS
Transducer:	PVC	PVC
	Teflon	TEF
Battery Pack:	Internal 12AA Holder	AA
	External 8D Enclosure	8D
	External 18D Enclosure	18D

Dimensions



Model:	ABM	100	-	---	UL	CM	-	--	---	-	---
---------------	-----	-----	---	-----	----	----	---	----	-----	---	-----

Non-Contact Ultrasonic Level Sensors (2-Wire Loop-Powered) for Fast Response Applications | UL-FR



The UL-FR is the fastest 2-wire loop-powered ultrasonic level sensor, ideal for liquid or solid level applications that require rapid response.

Features

- At least three (3) updates per second and the fastest HART communication
- Maintenance-free, non-contact continuous level measurements
- Self-cleaning design, no build-up or condensation on transducer face
- Plug-and-play installation with simple calibration
- Built-in temperature compensation
- 2-wire loop-powered operation
- 4-20 mA / 20-4 mA output standard
- HART communications with free calibration, diagnostics and data logging software
- PVC, aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



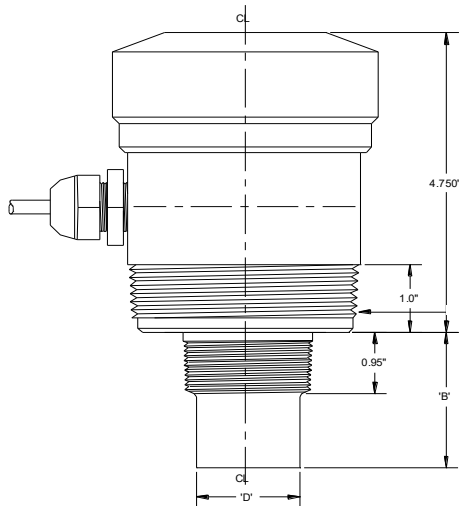
Applications

Liquid and solid level measurement for: Water, Wastewater, Chemical, Food, Beverage and more.

Technical Data	
Measuring Range:	0.4 to 100 ft (0.12 to 30.5 m)
Temperature:	-40 to 60°C (-40 to 140°F)
Pressure Rating:	≤ 2 Bar (29 psi)
Mounting:	1" - 6" NPT

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Loop-Powered (2-wire)	200
Maximum Range:	9 ft (2.7 m) - 148 kHz 16 ft (4.9 m) - 81 kHz 20 ft (6.1 m) - 80 kHz 30 ft (9.1 m) - 70 kHz 50 ft (15.2 m) - 52 kHz 60 ft (18.2 m) - 45 kHz 100 ft (30.5 m) - 25 kHz	148 081 080 070 052 045 148
Product Series:	Ultrasonic Sensor	UL
Communication:	HART	CH
Enclosure:	PVC Aluminum SS316L	PV AL SS
Transducer:	PVC Teflon	PVC TEF

Dimensions



Model:	ABM	200	-	---	UL	CH	-	--	---
---------------	-----	-----	---	-----	----	----	---	----	-----

Ultrasonic Transmitter with Remote Transducer for Very High Temperature Applications | UL-RT



The UL-RT ultrasonic transmitter with detached transducer is the ideal solution for liquid and solid level applications in very high temperature environments.

Features

- Transmitter with detached high temperature Teflon transducer (up to 130°C / 266°F)
- Maintenance-free, non-contact continuous level measurements
- Self-cleaning design, no build-up or condensation on transducer face
- Plug-and-play installation with simple calibration
- Built-in temperature compensation
- 2-wire loop-powered, 3-wire or 4-wire operation
- 4-20 mA / 20-4 mA output standard
- Optional HART, RS232 or RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- PVC, aluminum and SS316L housing options to withstand any environment
- Ingress protection IP68 rating (NEMA 6)



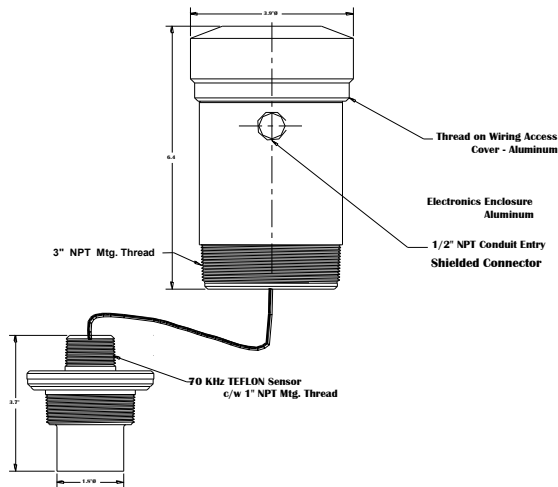
Applications

Level measurement for: Construction, Chemical, Food, Beverage and more.

Technical Data	
Measuring Range:	0.4 to 60 ft (0.12 to 18.2 m)
Temperature:	-40 to 130°C (-40 to 266°F)
Pressure Rating:	≤ 2 Bar (29 psi)
Mounting:	1" - 2" NPT

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Loop-Powered (2-wire)	200
	12-30 VDC Power (3-wire)	300
	120 VAC Power (4-wire)	400
	230 VAC Power (4-wire)	430
Maximum Range:	9 ft (2.7 m) - 148 kHz	148
	16 ft (4.9 m) - 81 kHz	081
	20 ft (6.1 m) - 80 kHz	080
	30 ft (9.1 m) - 70 kHz	070
	50 ft (15.2 m) - 52 kHz	052
	60 ft (18.2 m) - 45 kHz	045
Product Series:	Ultrasonic Sensor	UL
Communication:	HART	CH
	RS232	C2
	RS485	C4
Enclosure:	PVC	PV
	Aluminum	AL
	SS316L	SS
Transducer:	Teflon	TEF

Dimensions



Model:	ABM	- - -	-	- - -	UL	- -	-	- -	TEF
---------------	-----	-------	---	-------	----	-----	---	-----	-----

Non-Contact Mini Ultrasonic Level Transmitters for Liquid Applications | UM-LIQ



The UM-LIQ mini ultrasonic level transmitter is the ideal solution for short range liquid level applications.

Features

- Maintenance-free, non-contact continuous level measurements
- Self-cleaning design, no build-up or condensation on transducer face
- Plug-and-play installation with simple push-button calibration
- Built-in temperature compensation
- 3-wire operation
- 4-20 mA / 20-4 mA output standard
- RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- Optional relay SPDT 8A / 230 VAC for alarm or pump control
- Ingress protection IP68 rating (NEMA 6)



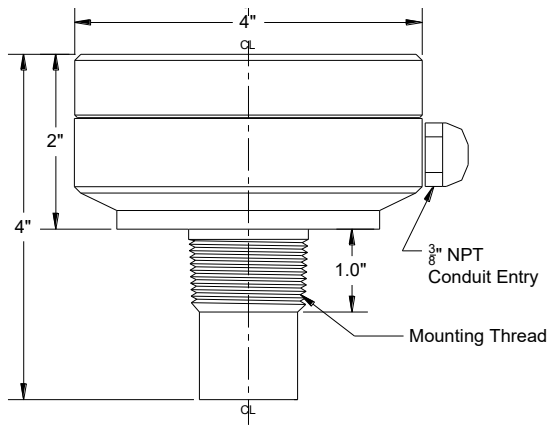
Applications

Liquid level measurement for: Water, Wastewater, Chemical, Food, Beverage and more.

Technical Data	
Measuring Range:	0.33 to 50 ft (0.10 to 15.2 m)
Temperature:	-40 to 60°C (-40 to 140°F)
Pressure Rating:	≤ 2 Bar (29 psi)
Mounting:	1", 1.5" or 2" NPT

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Power (3-wire)	300
Maximum Range:	6 ft (1.8 m) - 148 kHz	148
	16 ft (4.9 m) - 81 kHz	081
	20 ft (6.1 m) - 80 kHz	080
	33 ft (10.1 m) - 70 kHz	070
	50 ft (15.2 m) - 52 kHz	052
Product Series:	Mini Ultrasonic Transmitter	UM
Communication:	RS485	C4
Enclosure:	PVC	PV
Transducer:	PVC	PVC

Dimensions



Model:	ABM	300	-	- - -	UM	C4	-	PV	PVC
---------------	-----	-----	---	-------	----	----	---	----	-----

Non-Contact Mini Ultrasonic Level Transmitters for Sanitary Applications | UM-SAN



The UM-SAN mini ultrasonic level transmitter is the ideal solution for short range sanitary / hygienic liquid level applications.

Features

- SS316L transducer face with 1.5" or 2" tri-clamp mounting
- Surface finish exposed to process exceeds a No.4/dairy finish
- Withstands clean-in-place (CIP) processes with high temp. / pressure upgrade
- Maintenance-free, non-contact continuous level measurements
- Self-cleaning design, no build-up or condensation on transducer face
- Plug-and-play installation with simple push-button calibration
- Built-in temperature compensation
- 3-wire operation with 4-20 mA / 20-4 mA output standard
- RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- Optional relay SPDT 8A / 230 VAC for alarm or pump control
- Ingress protection IP68 rating (NEMA 6)



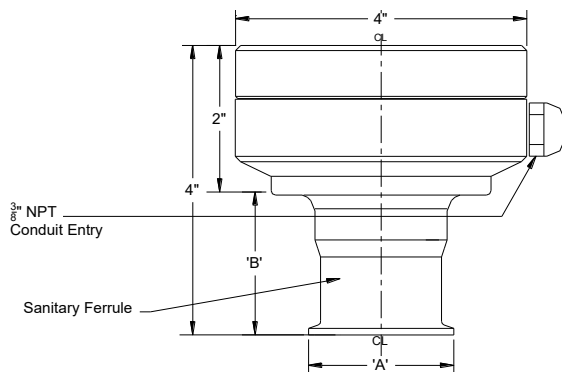
Applications

Liquid level measurement for: Water, Food, Beverage, Pharmaceutical and more.

Technical Data	
Measuring Range:	0.33 to 33 ft (0.12 to 9.1 m)
Temperature:	-40 to 60°C (-40 to 140°F) or -40 to 130°C (-40 to 266°F) with HTP
Pressure Rating:	≤ 2 Bar (29 psi) or ≤ 5 Bar (72.5 psi) with HTP
Mounting:	1.5" or 2" tri-clamp

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Power (3-wire)	300
Maximum Range:	6 ft (1.8 m) - 148 kHz 16 ft (4.9 m) - 81 kHz 20 ft (6.1 m) - 080 kHz 33 ft (10.1 m) - 070 kHz	148 081 080 070
Product Series:	Mini Ultrasonic Transmitter	UM
Communication:	RS485	C4
Enclosure:	PVC	PV
Transducer:	SS316L 1.5" Tri-Clamp SS316L 2" Tri-Clamp	S15 S20
Optional:	High Temperature and Pressure	HTP

Dimensions



Model:	ABM	300	-	- - -	UM	C4	-	PV	- - -	-	- - -
---------------	-----	-----	---	-------	----	----	---	----	-------	---	-------

Non-Contact Mini Ultrasonic Level Transmitters for High Temperature Applications | UM-HT



The UM-HT mini ultrasonic level transmitter is the ideal solution for short range liquid level applications in high temperature processes.

Features

- High temperature Teflon transducer withstands up to 130°C (266°F)
- Maintenance-free, non-contact continuous level measurements
- Self-cleaning design, no build-up or condensation on transducer face
- Plug-and-play installation with simple push-button calibration
- Built-in temperature compensation
- 3-wire operation with 4-20 mA / 20-4 mA output standard
- RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- Optional relay SPDT 8A / 230 VAC for alarm or pump control
- Ingress protection IP68 rating (NEMA 6)



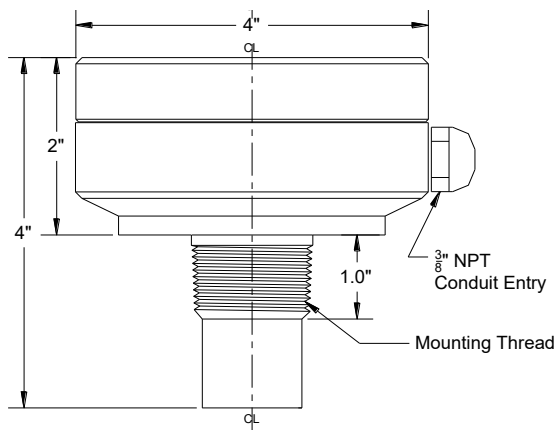
Applications

Liquid level measurement for: Water, Wastewater, Chemical and more.

Technical Data	
Measuring Range:	0.33 to 50 ft (0.10 to 15.2 m)
Temperature:	-40 to 130°C (-40 to 266°F)
Pressure Rating:	≤ 2 Bar (29 psi)
Mounting:	1", 1.5" or 2" NPT

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Power (3-wire)	300
Maximum Range:	6 ft (1.8 m) - 148 kHz	148
	16 ft (4.9 m) - 81 kHz	081
	20 ft (6.1 m) - 80 kHz	080
	30 ft (9.1 m) - 70 kHz	070
	50 ft (15.2 m) - 52 kHz	052
Product Series:	Mini Ultrasonic Transmitter	UM
Communication:	RS485	C4
Enclosure:	PVC	PV
Transducer:	Teflon	TEF

Dimensions



Model:	ABM	300	-	- - -	UM	C4	-	PV	TEF
---------------	-----	-----	---	-------	----	----	---	----	-----

Non-Contact Mini Ultrasonic Level Transmitters for Short Blanking Applications | UM-SB



The UM-SB mini ultrasonic level transmitter is the ideal solution for short range liquid level applications that require minimal blanking distance.

Features

- Short blanking distance of 2" (50.8 mm)
- Maintenance-free, non-contact continuous level measurements
- Self-cleaning design, no build-up or condensation on transducer face
- Plug-and-play installation with simple push-button calibration
- Built-in temperature compensation
- 3-wire operation with 4-20 mA / 20-4 mA output standard
- RS485 communications with free calibration, diagnostics and data logging software
- PLC compatible (Modbus RTU)
- Optional relay SPDT 8A / 230 VAC for alarm or pump control
- Ingress protection IP68 rating (NEMA 6)



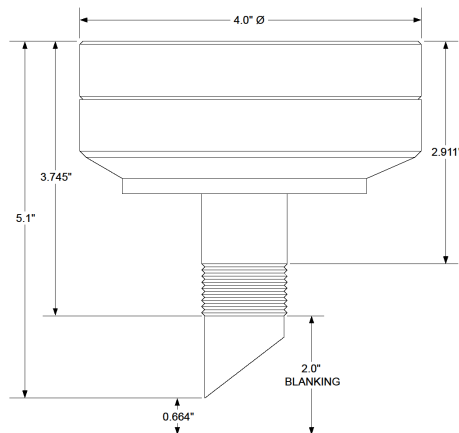
Applications

Liquid level measurement for: Water, Wastewater, Chemical and more.

Technical Data	
Measuring Range:	0.16 to 6 ft (0.05 to 1.8 m)
Temperature:	-40 to 60°C (-40 to 140°F)
Pressure Rating:	≤ 2 Bar (29 psi)
Mounting:	1" NPT

Catalogue Number Ordering		
Supply Voltage:	12-30 VDC Power (3-wire)	300
Maximum Range:	6 ft (1.8 m) - 148 kHz	148
Product Series:	Mini Ultrasonic Transmitter	UM
Communication:	RS485	C4
Enclosure:	PVC	PV
Transducer:	PVC	PVC
Special:	Short Blanking	SB

Dimensions



Model:	ABM	300	-	148	UM	C4	-	PV	PVC	-	SB
---------------	-----	-----	---	-----	----	----	---	----	-----	---	----