

# LS-202 Ultrasonic Level Transmitter

The Pyxis LS series general purpose ultrasonic Sensor is an innovative ultrasonic liquid level sensor that replaces float, conductance and pressure sensors that fail due to contact with dirty, sticky and scaling liquids in small, medium and large capacity tanks. These liquid level sensors can be used in either open or enclosed tanks. The sensor provides continuous level measurement up to 78 inches (6.6 ft. or 2m) with a 4-20 mA signal output, RS485 and Bluetooth digital output, and can be configured via Pyxis free uPyxis® APP. The sensor can be powered by 4 AA alkaline batteries or a 24VDC external power. This battery powered, and Bluetooth digital output enabled level sensor is perfectly suitable for the applications where wires are difficult to layout saving end users substantial monetary benefits during installation. A 1.3" push button OLED interface allows for device configuration and instant access to process data. This noncontact liquid level sensor is well suited for corrosive liquids, and can be used for cooling tower, boiler day tank, other chemical feed applications.



## Typical Applications

The Pyxis LS Ultrasonic level sensor is ideal for use as water level sensors, water & process chemical tank level sensors, liquid level transmitters, or other applications requiring accurate and continuous liquid level control or liquid level measurement.





## Features




- Dual embedded transmitters in sensor body for selection – 4-20mA or RS-485 supporting MODBUS
- Bluetooth® Version 4.1 for measurement result output and configuration
- Bluetooth Range - 100+ ft Line of Site
- A 1.3" OLED and 4 push-buttons for measurement result display and configuration
- Two power supplies: 4 AA alkaline batteries or 24VDC external power, and smart switch capability
- Battery life up to 1 year thru using our ultra-low power design and smart power management
- Easy and quick configuration via uPyxis® APP in mobile phones
- Can be paired with Pyxis BTA-100 Bluetooth gateway to output 4-20mA
- PVDF transducer and 6P polycarbonate enclosure for corrosive liquids
- Automatic temperature compensation for accurate measurement

## Specifications

Items	Specification
Range	LS-202: 4 – 78 inches (0.1-2 M)
Accuracy	±0.15% of range
Resolution	0.2 inch (0.5mm)
Dead band	4 inches (10mm)
Configuration	uPyxis® APP in mobile phone
Power supply	LS-202: 4x AA batteries / 24VDC, 1W Max
Signal output	LS-202: Bluetooth® Version 4.1 4-20mA, RS-485 MODBUS
Enclosure Rating	IP67
Process mount	1" NPT
Storage temperature	-4 - 158°F (-20 °C - 70° C)
Operational temperature	14 - 140°F (-10° C - 60° C)
Enclosure material	Polycarbonate
Transducer material	PVDF
Dimension	6.8 inch long, 3.15 inch diameter (172mm long, 80mm diameter)
Weight	550g (1.3 lbs)
Regulation	CE / Class I Div II

\*With Pyxis' continuous improvement policy, this specification is subject to change without notice.

 <b>PYXIS LS202 PRODUCT LINE - SELECT*A*GUIDE</b> 			
Functional Capability	LS-202	BTA-100	BTA-400
Part #	54002	50729	50751
Ultrasonic Level Sensor w/Local Display	X		
Bluetooth Output / 4-AA Battery Powered	X		
4-20mA/RS485 24V Powered / Wired To Controller or Display	X		
Single Channel Receiver / Display - Bluetooth IN / 4-20mA-RS485 OUT		X	
Four Channel Receiver / Display - Bluetooth IN / 4-20mA-RS485 OUT			X
  			
<small>*NOTE* - LS-202 Can Use Bluetooth via AA Battery to BTA-100 &amp; uPyxis APP OR Wired Controller or UC300B</small>			

 <b>PYXIS LEVEL SENSOR ACCESSORIES</b> 		
Accessory Name / Description	Part #	Photo
4.9' LS-202 Waterproof Cable - 7Pin Adapter w/Flying Leads	50762	NA
7Pin Waterproof to 7Pin Standard Cable Converter	50761	NA
25' Standard Extension Cable (4-20mA/RS485)	MA-C25	
50' Standard Extension Cable (4-20mA/RS485)	MA-C50	
75' Standard Extension Cable (4-20mA/RS485)	MA-C75	
BTA-100/400 Wall Mounting Bracket	50753	