

## LSR-801/L Series Radar Level Transmitters

### Product Description

The Pyxis LSR-801 Series sensors are W-band FMCW continuous frequency modulation radar level transmitters. They provide continuous level measurement up to 591 inches (49.2 ft. or 15 m) with 4-20 mA output as well as RS485, BlueTooth 5.0®. The LSR-801L is also equipped with LoRa (Long Range Radio) digital output for long-distance wireless level sensor data access.

The LSR-801 Series can be wirelessly configured via the Pyxis uPyxis® app for Mobile or Desktop devices enabling rapid integration and deployment in the field. The sensors should be powered by a 24 VDC external power supply and are ideal for use with commonly used OEM controllers, PLC or DCS systems. This non-contact liquid level sensor platform is well suited for corrosive liquids and can be used for industrial, municipal and process liquid storage as well as chemical feed applications.

### Typical Applications

The Pyxis LSR-801 Series Radar level sensors are ideal for use as a water level sensor, water & process chemical tank level sensor, liquid level transmitter, or other applications requiring accurate and continuous liquid level control or liquid level measurement.

### Features

- i. Radar Liquid Level Measurement up to 15 Meters (+2mm)
- ii. Embedded Transmitters 4-20mA and RS-485 Outputs
- iii. Bluetooth® Version 5.0 for Rapid-Wireless uPyxis Configuration
- iv. LoRa (Long Range Radio) Implemented LSR-801L
- v. 24VDC Powered with Smart Switch Capability
- vi. PVDF Transducer / 6P Polycarbonate Enclosure
- vii. 10-ft Waterproof 7-Pin Quick Adapter/Flying Lead Cable
- viii. Extension Cables Available
- ix. Automatic Temperature / Electromagnetic Noise Compensation

LSR-801



LSR-801L



## Specifications

Item	LSR-801L	LSR-801
<b>P/N</b>	51959	54027
<b>Power Supply</b>	24VDC, 2.5W Max	24VDC, 2.0W Max
<b>Radio Output</b>	Long Range Radio (LoRa)	NONE
<b>Bluetooth®</b>	Bluetooth® 5.0 4.1, 32ft (10m) Line of Sight for use with uPyxis®	
<b>Wired Output</b>	(1) 4-20mA / RS-485 Modbus	
<b>Output Cable</b>	Waterproof 7-Pin (10ft / 3m) Cable with Adapter & Flying Lead	
<b>Extension Cable</b>	Waterproof Extension Cables Sold Separately	
<b>Range</b>	2-591in (0.05-15m)	
<b>Resolution</b>	0.02in (0.5mm)	
<b>Accuracy</b>	±2mm	
<b>Dead Zone</b>	2in (5cm)	
<b>Measure Interval</b>	Continuous (avg of 3 readings/second)	
<b>Installation</b>	2in NPT	
<b>Weight</b>	0.45lb (210g)	
<b>Dimension</b>	4.33in (110mm) Height, 2.95in (75mm) Diameter	
<b>Enclosure Material</b>	Polycarbonate (PC), Polybutylene Terephthalate (PBT)	
<b>Ambient Temp.</b>	5-122 °F (-15-50 °C)	
<b>Storage Temp.</b>	-4-140 °F (-20-60 °C)	
<b>Pressure</b>	-29-58 psi (-0.2-0.4MPa)	
<b>Enclosure Rating</b>	IP66	IP67
<b>Regulation</b>	CE/RoHS/UKCA	CE/RoHS/UKCA

\* With Pyxis' continuous improvement policy, this specification is subject to change without notice.  
 (1) LSR-801L may be used with the Pyxis LoRa containing CloudLink 4G Gateway.

**Contact [order@pyxis-lab.com](mailto:order@pyxis-lab.com) for Details**

## Order Information

LS-801 (Includes 10ft Flying Lead Cable with Adapter)  
 LS-801L (Includes 10ft Flying Lead Cable with Adapter)

MA-AC-7US (110VAC-24VDC Power Supply Adapter)  
 MA-AC-7EU (230VAC-24VDC Power Supply Adapter)  
 10ft Water-Proof Flying Lead Cable with Adapter  
 25ft Water-Proof Extension Cable  
 50ft Water-Proof Extension Cable  
 100ft Water-Proof Extension Cable  
 LSR-MB-W001 Wall Mounting Bracket  
 LSR-MB-H001 Hanging Mounting Bracket  
 LSR-MB-B001 Belt Mounting Bracket

## Part Number

54027  
 51959  
 26398  
 28787  
 MA-L10  
 MA-L25  
 MA-L50  
 MA-L100  
 24658  
 26307  
 23220