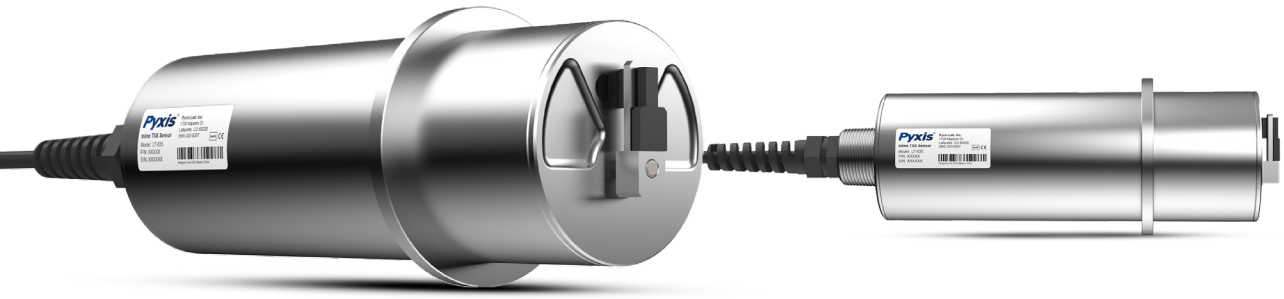

LT-63X SERIES

Auto-Cleaning Turbidity Sensors

Scan the QR Code to
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DESCRIPTION

The LT-63X Series sensor platform (including the LT-631, LT-632 and LT-633) are submersible, waterproof, self-cleaning sensors utilize dual infrared detection technology to measure turbidity in the ranges of 0 to 4000 NTU. The sensor automatically compensates for disturbances caused by flow fluctuations, climate change, color change or changes in turbidity. The instrument design is virtually maintenance-free, and the self-cleaning capability of the sensor prevents deviations caused by air bubbles and suspended solids particulate.

It is powered by a 24 VDC/6W power supply and offers fully integrated 4-20 mA and RS-485 Modbus output signals for connection to any controller, PLC or DCS network. When clean, the unique Pyxis sensor design offers a stability of <0.1 NTU for up to 1-year without calibration. Additionally, this sensor platform can be accessed via the MA-CR Bluetooth/USB adapter for local display, diagnostics, auto-wiper programming, sensor cleaning and calibration when using the uPyxis APP for mobile or desktop devices. The LT-63X series sensor is ideal for use in raw water, surface water, storm water, process water and discharged water applications.

FEATURES

- Resolution as low as 0.1 NTU
- Built-In Transmitter, without Pre-Amplifier or Meter Head
- 4-20mA Isolated Signal & RS-485 Modbus (RTU) Output
- Simple Wireless Calibration using uPyxis Mobile or Desktop App and MA-CR Bluetooth® Adapter
- Self-Cleaning with Wiper Timer Interface programmable via uPyxis®
- Optional Calibration with Pyxis Formazin Calibration Standards or Field Water Samples
- ¾ inch MNPT Threaded for Fixed Submersion

SPECIFICATIONS

Item	LT-631	LT-632	LT-633
Part Number	53249	53250	10002
Parameter	Turbidity	Turbidity	Turbidity
Measurement Range	0.00–500.00NTU	0.00–1,000.00NTU	0.00–4,000.00NTU
Unit of Measure	NTU (Nephelometric Turbidity Unit)		
Lower Detection Limit	0.5NTU		
Precision	<100: ±2NTU or 2% of the value, >100: ±10% of the reading		
Accuracy	±2NTU or 3% of the value		
Resolution	0.1NTU		
Response Time	T95<12 seconds		
Calibration Method	Field tested process sample or formazin calibration standard		
Dual Wavelengths	Dual InfraRed Light Sources - ISO-7027 Compliant		
Method	Scattering		
Power Supply	22-26VDC, 6W		
Operating Temperature	32–122 °F (0–50 °C)		
Storage Temperature	-7–60 °C (20–140 °F)		
Outputs	Isolated 4-20mA Analog Output and Isolated RS-485 Modbus Digital Output		
Installation	Submersed Fized Conduit ¾ inch, Hoisting chain, or inline using ST-008 Tee		
Sensor Distance Install	From bottom of vessel (>15cm) / From side of vessel >10cm)		
Material	316L Stainless Steel Body and Wiper Arm, PTFE Wiper Blade		
Weight	1,530g (3.3lbs)		
Operational Pressure	45psi (3.5Bar)		
Rating	IP-68 fully dustproof and waterproof		
Regulation	CE / RoHS		
Dimensions	254mm L, 57mm W, 57mm H		
Cable Length	33ft (10m) IP-67 8PIN Adapter, 4.9ft (1.5m) Flying Lead IP-67 8PIN Adapter		

ACCESSORIES

- (1) LT-63X Sensor with Bulkhead Cable with 8PIN Female Adapter (33ft/10m)
- (1) MA-1.5CR Flying Lead Cable with 8PIN Male Adapter/Flying Lead (4.9ft/1.5m)
- (1) MA-CR Bluetooth® Adapter
- (1) MA-NEB USB Adapter

User Manual is Available for Download at www.pyxis-lab.com/shop

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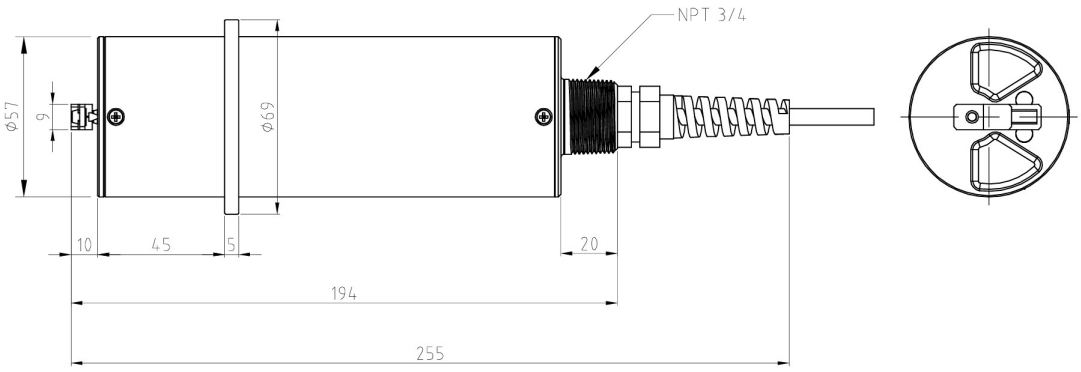
DIAGRAMS

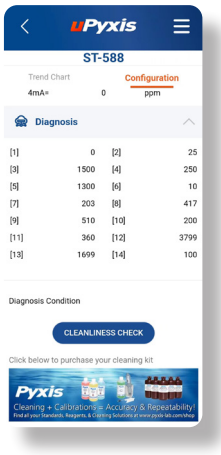
ST-750 Dimensions (mm)

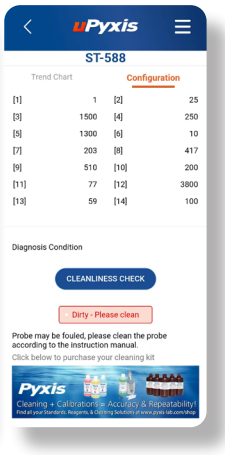


CALIBRATION PROCESS

The LT-63X series sensor can be accessed via Bluetooth or USB from a mobile or desktop device using the uPyxis Mobile or Desktop Apps and the MA-CR Bluetooth/USB Adapter. The uPyxis Apps feature a live graphical display of the sensor value for turbidity as well as a sensor diagnostic, calibration function and wiper/cleaning iteration customization. After the sensor is properly cleaned it can then be calibrated for zero (clean water) and slope using sample water which has been tested for NTU.

*Contact **service@pyxis-lab.com** for Support*





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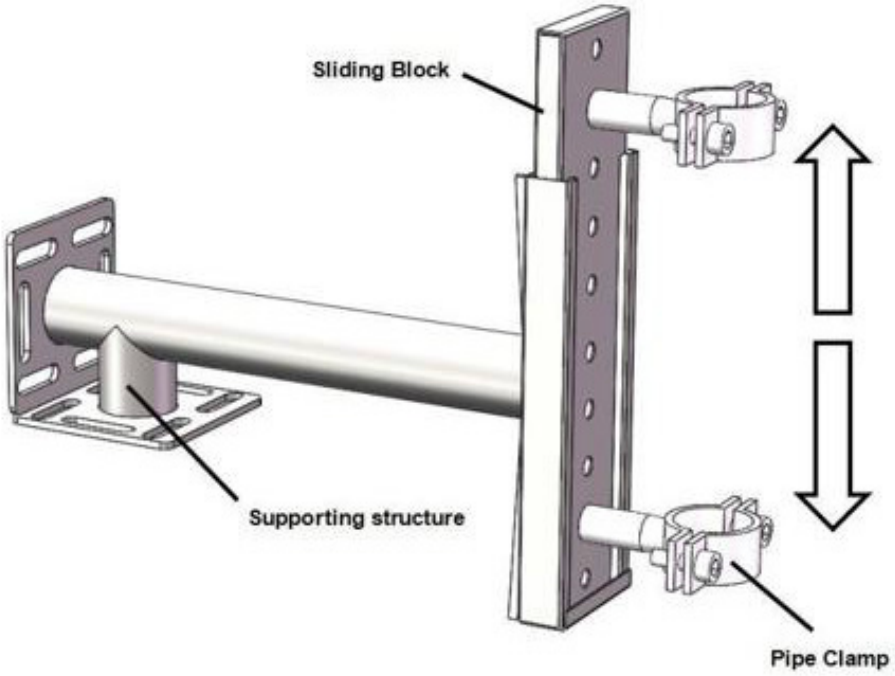
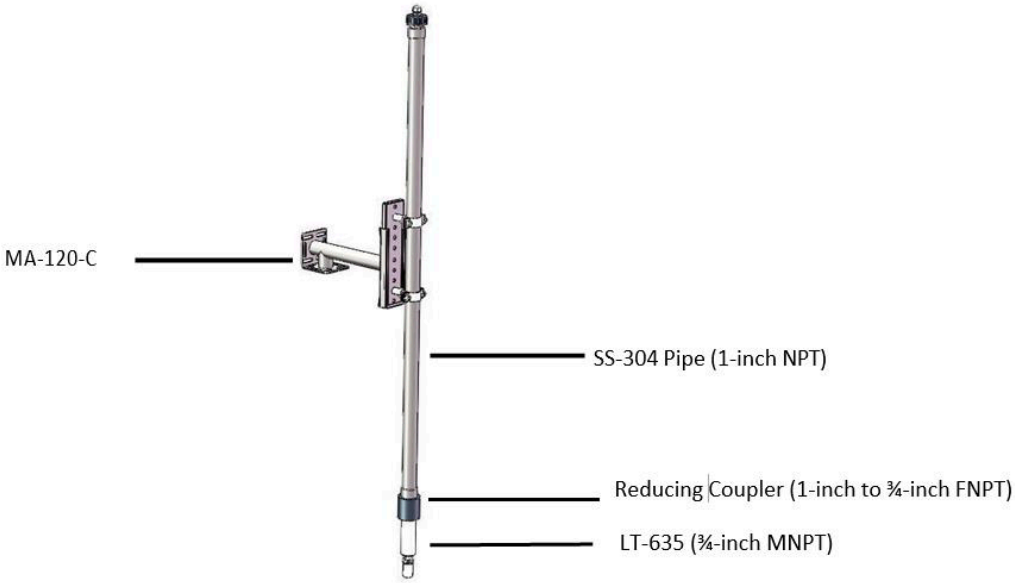
INSTALLATION METHODS

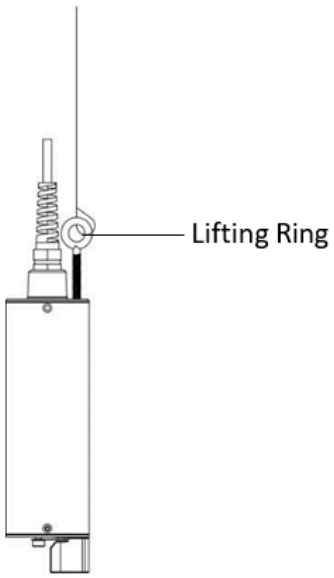
The LT-63X may be installed in a submersed/fixed application using the MA-120-B submersion adapter mounting bracket (Part Number: 50783)

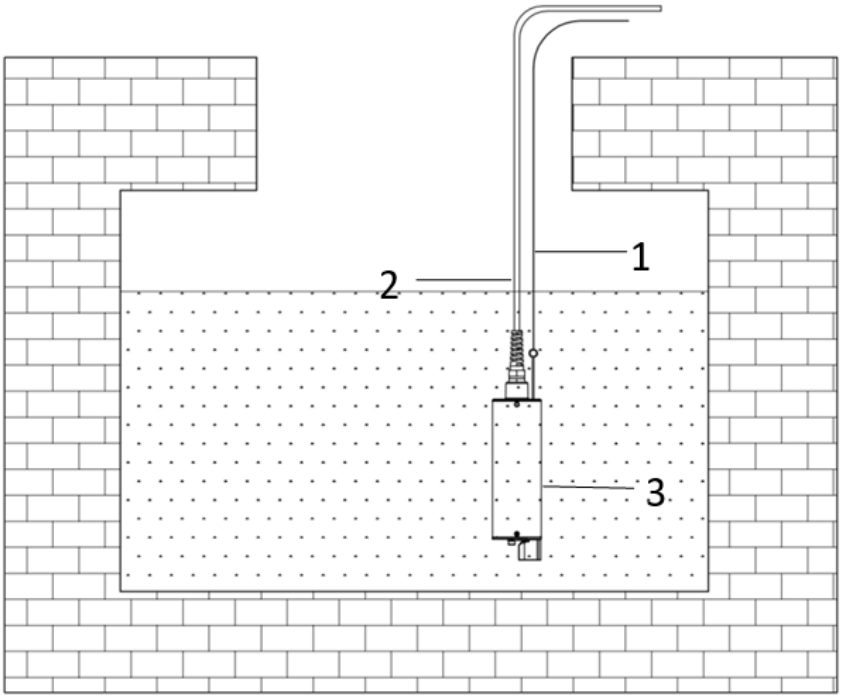




INSTALLATION METHODS

The LT-63X series comes equipped with a lifting ring which allows the sensor to be lifted and lowered using a user provided chain or cable. This method of installation enables use of the LT-63X in clarifier or thickener sludge bed depth profiling.





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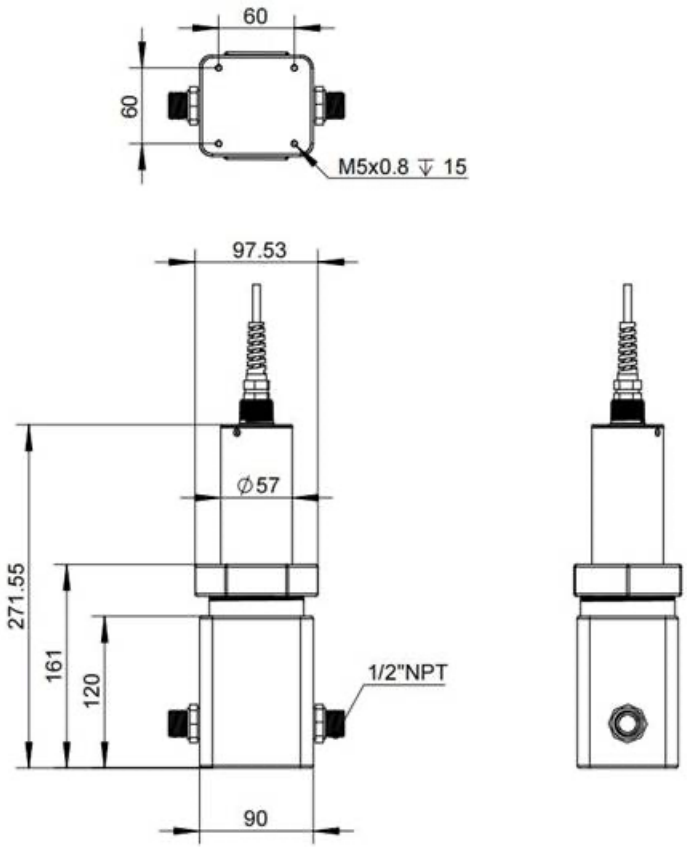
INSTALLATION METHODS

The LT-63X turbidity sensors can now be installed in a bypass flow arrangement using the ST-008 inline black ABS block flow tee assembly. This new tee is uniquely designed for use with the LT-632, LT-633, LT-634 sensors only and enable accurate and repeatable turbidity value measurements in a by-pass flow arrangement. These sensors may be operated at pressures up to 45psi while inserted into the ST-008 tee assembly. Inlet and outlet line size is ½ -inch FNPT.



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ORDER INFORMATION	PART NUMBER
LT-631 Auto-Brushing Turbidity Sensor	53249
LT-632 Auto-Brushing Turbidity Sensor	53250
LT-633 Auto-Brushing Turbidity Sensor	10002

OPTIONAL/REPLACEMENT ACCESSORIES

LT-63X Replacement Wiper Arm and Blade Assembly Kit	50700-A50
MA-CR 8PIN Bluetooth® Adapter	MA-CR
ST-008 Stainless Steel Block Tee Assembly ¾ inch	28660
UC-50 Single Sensor Display & Data Logging Terminal	43007
UC-100A 4 Sensor Display & Data Logging Terminal	43054
MA-120-B Submersible Adapter Mounting Bracket	50783
MA-50CR 50’ Extension Cable	50743
MA-100CR 100’ Extension Cable	50744
Inline Sensor Cleaning Kit	SER-01

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