



Features

- pH, ORP, Conductivity & Flow parameters available
- 24 VDC / 24 VDC Loop
- Easy to read 2 X 16 character LCD display
- Quick and easy to calibrate
- Single 4-20mA output with range expandability
- 1/4 DIN size, NEMA 4X polycarbonate housing
- Shark-TX: Universal mounting hardware provided for surface, panel and pipe mounting
- Shark-TXP: Panel or DIN rail mounting hardware provided

Description

SUMMARY

Complete and versatile, SHARK-TX is the only 1/4 DIN and DIN rail mountable two wire transmitter on the market that allows the user to select one of four measuring parameters.

FOUR MEASURING PARAMETERS

Select the parameter you wish to measure from the easy-to-use LCD menu on the front cover. Choose Conductivity, pH, ORP or Flow.

COMPLETE - NO EXTRA CARDS OR OPTIONS REQUIRED

Each SHARK-TX comes complete. There are no extra costs associated with buying boards for different applications.

TWO MOUNTING OPTIONS

SHARK-TX comes complete with a universal mounting kit for surface, panel and pipe-mount applications. The NEMA 4X 1/4 DIN enclosure is perfect for stand-alone or panel-mount operation.

SHARK-TXP is NEMA 4X for front

panel mounting and comes complete with DIN rail mounting hardware for mounting in a control panel.

DISPLAY

2-line, 16-character LCD on the front panel.

ANALOG OUTPUTS

The SHARK-TX provides an isolated and fully scalable 4-20 mA output.

ENCLOSURE

SHARKTX is packaged in a rugged NEMA 4X polycarbonate enclosure making it ideally suited for heavy-duty applications such as industrial wastewater neutralization, municipal water and wastewater, pulp and paper, and process control. The SHARKTXP enclosure is also polycarbonate with a NEMA 4X front panel, and DIN rail mounting hardware on the back.

Applications

- Process Control
- Industrial and Municipal
- Water Treatment
- Industrial and Municipal
- Waste Treatment and Neutralization
- Fume Scrubbers
- Suitable for the Plating, Circuit Board Manufacturing, Food and Beverage, Chemical Processing, Pulp & Paper, Mining, Nuclear Energy and Pharmaceutical Industries

SHARK TX/P pH, ORP, Conductivity, Flow Transmitter

Technical Data

	pH	ORP	Conductivity			Flow																	
Display	Front Panel: 4 x 7 segment 1/2" LED display, 1 LED indicator On-line,7 LED Bar Graph. Inside Panel: 2 x 16 alpha-numeric LCD display																						
Measuring Range	pH: 0.01 to 14.00 Temp: 0 to 100°C or 32° to 212°F	ORP: -1999 to +1999mV (Dependent on sensor) Temp: 0 to 100°C or 32° to +212°F	<table><tr><td>MΩ/ cm³</td><td>0 to 19.9</td><td>0.01</td></tr><tr><td rowspan="3">µS/ cm³</td><td>0 to 2.00</td><td>0.01</td></tr><tr><td>0 to 20.0</td><td>0.1</td></tr><tr><td>0 to 200</td><td>0.1</td></tr><tr><td rowspan="2">mS/ cm³</td><td>0 to 2000</td><td>1.0</td></tr><tr><td>0 to 20</td><td>10</td></tr><tr><td></td><td>0 to 200</td><td>50</td></tr></table>	MΩ/ cm³	0 to 19.9	0.01	µS/ cm³	0 to 2.00	0.01	0 to 20.0	0.1	0 to 200	0.1	mS/ cm³	0 to 2000	1.0	0 to 20	10		0 to 200	50	Flow: 0 to 9999 with selectable flow rate units Volume: 0 to 9999 with Auto Range Flow rate units: Gallons (GP), Cubic Feet (CF), Liters (LP), Cubic Meters (CM), custom by entering factor related to Gallons. Time units: Seconds (S), Minutes (M), Hours (H)	
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mS/ cm³	0 to 2000	1.0																					
	0 to 20	10																					
	0 to 200	50																					
Temperature Compensation	Automatic or Manual 0 to 100°C (32° to +212°F)	Not required	Automatic or Manual User selectable tempera- ture compensation slope 0.0 to 10.0% / °C. 0 to 100°C (32° to 212°F)		Not required																		
Temperature Unit	°C or °F				Not required																		
Temperature Sensor	User selectable: 300Ω NTC Thermistor, 3000Ω NTC Thermistor or Pt. 1000 RTD																						
Calibration modes	Auto-Calibration, Manual Calibration, Temperature Display	Manual Calibration Temperature Calibration	Dry Calibration Sample Calibration Temperature Calibration		K factor input																		
Ambient Conditions	Temperature: -20°C to +60°C or -4°F to +140°F Humidity: 0 to 90% RH (non-condensing)																						
Sensor to Trans- mitter Distance	Differential Sensor: 3000 ft Combination Sensor:10 ft		300 ft		2000 ft																		
Analog Output	4 to 20 mA Isolated Output, Range expand 0 to 100% of full scale (min segment 10% of full scale),max. load 800Ω																						
Memory Back-up	All user settings are retained indefinitely in memory (EEPROM)																						
Mechanical	SHARKTX Enclosure:NEMA 4X, 1/4 DIN, polycarbonate enclosure with two 1/2" conduit holes SHARKTXP Enclosure:NEMA 4X front panel, 1/4 DIN, polycarbonate SHARKTX Mounting: Universal Mounting kit for surface, pipe and panel mount included SHARKTXP Mounting: Panel and DIN rail mount included																						
Sensor Input	Probe: -600 to +600 mV Temp. Sensor: 0 to 9999 Ω	Probe: -1999 to +1999 mV Temp. Sensor: 0 to 9999 Ω	Cell: 0 to 9999 Ω Temp. Sensor: 0 to 9999 Ω		Paddle: 0 to 2000 Hz																		
Invalid Entries	Invalid entries cannot be stored																						
Manual Test Mode	Process value can be simulated with arrow keys to verify correct setup of outputs																						
Output Hold	4 to 20 mA output is placed on hold when the transmitter is in Menu mode																						
Calibration Data	Recall data from last calibration, calibra- tion mode, 1st&2nd accepted buffer value and probe mV output, calibration tempera- ture, calibration slope, and probe efficiency		Recall data from last calibra- tion, calibration buffer ac- cepted value and cell resistance, calibration temperature.		Recall store K factor.																		
Auto Return	User selectable auto return if the transmitter is left in menu mode for more than 10 min.																						
Display Damping	User can select rate at which SHARK updates display. Enables display damping of unstable process																						
Net Weight	SHARK-TX: 0.71 lbs (0.32 kg) SHARK-TXP: 0.25 lbs (0.12 kg)																						

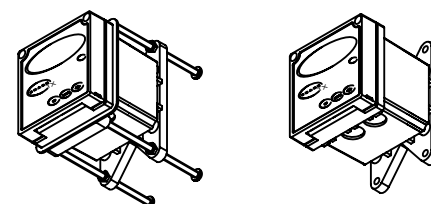
SHARK TX/P pH, ORP, Conductivity, Flow Transmitter

Dimensions and Mounting Configurations

SHARK-TX

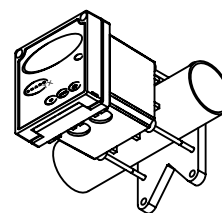
Universal Mount, NEMA 4X Enclosure, 4-20 mA Loop + 24 VDC Power

Mounting Configurations

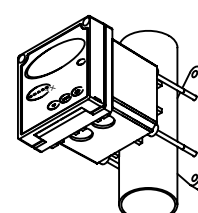


PANEL MOUNT

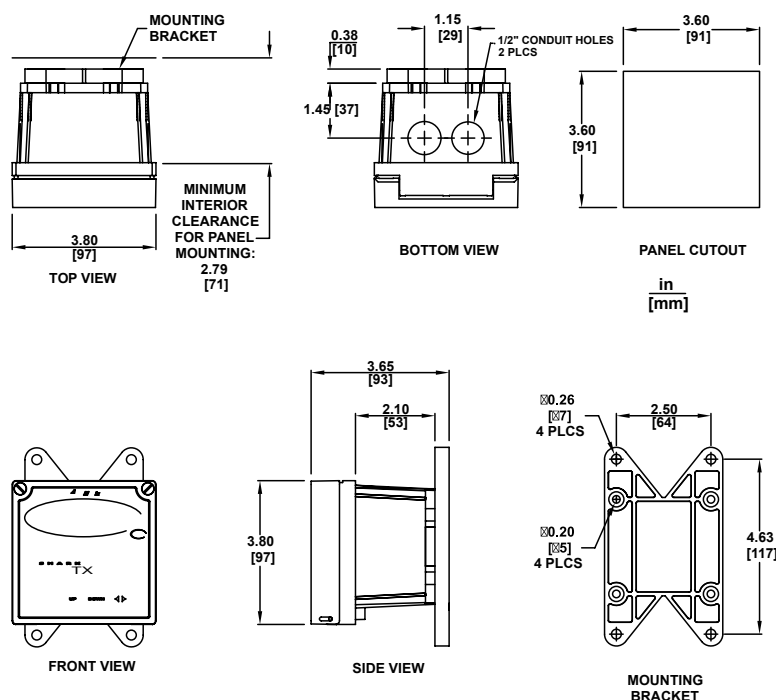
SURFACE MOUNT



HORIZONTAL
PIPE MOUNT



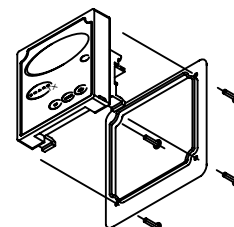
VERTICAL
PIPE MOUNT



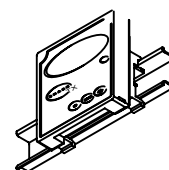
SHARK-TX

Panel Mount and DIN Rail Mount, NEMA 4X Front Panel, 4-20 mA Loop + 24 VDC Power

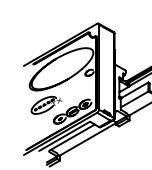
Mounting Configurations



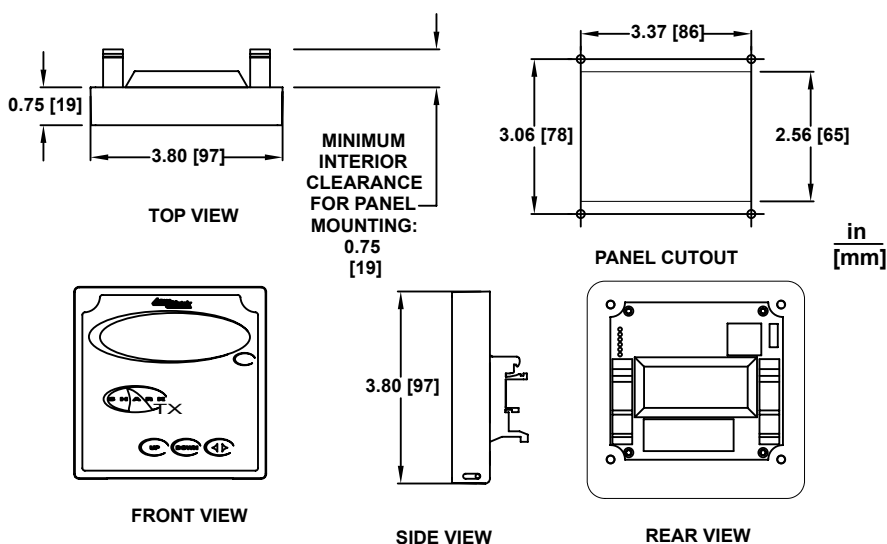
PANEL MOUNT



TS35 DIN RAIL MOUNT



TS32 DIN RAIL MOUNT



Ordering Information

SHARK	Multi-parameter Controller / Analyzer
120	120 Vac, 50/60 Hz Power (standard)
240	240 Vac, 50/60 Hz Power
SHARK -	

Ordering Information

SHARK-TX

Universal Mount, NEMA 4X Enclosure, 4-20 Loop + 24 VDC Power



SHARK-TXP

Panel Mount and DIN Rail Mount, NEMA 4X Front Panel, 4-20 Loop + 24 VDC Power

