Model SHARK-TX/P
Multi-Parameter Transmitter

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

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

Description

SUMMARY
Complete and versatile, SHARKTX 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 / OPTIONS REQUIRED
Each SHARK comes complete. There are no extra costs associated with buying boards for different applications.

TWO MOUNTING OPTIONS
SHARKTX 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. SHARKTXP 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 OUTPUT
SHARK provides one isolated, independent, 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.

AquaMetrix

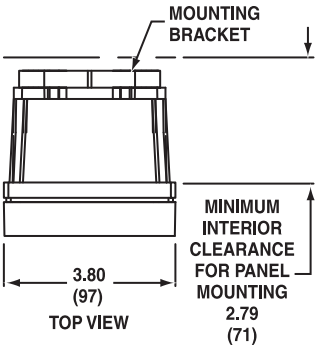
Technical Data

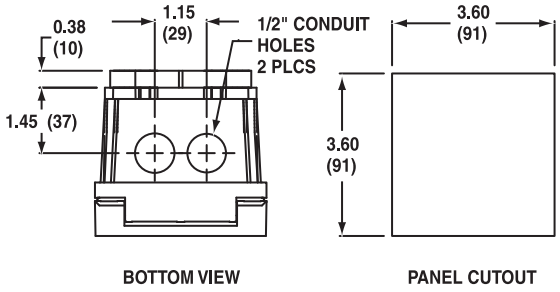
	pH	ORP	Conductivity	Flow
Display	2 x 16 alpha-numeric LCD display			
Power Requirements	4 to 20mA, Loop Powered, 16 to 32 VDC			
Measuring Range	pH: 0.01 to 14.00 Temp: 0 to 100°C or 32° to +212°F	ORP: -1999 to +1999mV (Dependent on sensor) Temp: 0 to 100°C or 32° to +212°F	MΩ/cm³: 0 to 19.99 / 0.01 uS/cm³: 0 to 2.000 / 0.01; 0 to 20.00 / 0.1; 0 to 200.0 / 0.1; 0 to 5000 / 1.0 mS/cm³: 0 to 20.00 / 10; 0 to 200.0 / 50 Temp: 0 to 100°C or 32° to +212°F	Flow: 0 to 9999 with selectable flow rate units Volume: 0 - 999 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)
Temperature Compensation	Automatic or Manual 0 - 100°C (32° to +212°F)	Not required	Automatic or Manual User selectable temperature 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			Not required
Calibration Modes	Auto-Calibration Manual Calibration Temperature Calibration	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 Transmitter Distance	Differential Sensor: 3000 ft Combination Sensor: 10 ft		300 ft	2000 ft
Analog Output	4 to 20mA 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	SHARK*TX* Enclosure: NEMA 4X, 1/4 DIN, polycarbonate enclosure with two 1/2" conduit holes SHARK*TXP* Enclosure: NEMA 4X front panel, 1/4 DIN, polycarbonate			
	SHARK*TX* Mounting: Universal Mounting kit for surface, pipe and panel mount included SHARK*TXP* Mounting: Panel and DIN rail mount included			
Sensor Input	Probe: -600 to +600mV Temp. Sensor: 0 to 9999Ω	Probe: -1999 to +1999mV Temp. Sensor: 0 to 9999Ω	Cell: 0 to 9999Ω Temp. Sensor: 0 to 9999Ω	Paddle: 0 to 2000Hz
Invalid Entries	Invalid entries cannot be stored			
Manual Test Mode	Process value can be simulated with arrow keys to verify correct setup of output			
Output Hold	4 to 20mA output is placed on hold when the transmitter is in Menu mode			
Calibration Data	Recall data from last calibration, calibration mode, 1st & 2nd accepted buffer value and probe mV output, calibration temperature, calibration slope, and probe efficiency		Recall data from last calibration, calibration buffer accepted 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 the transmitter 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)			
Approvals	ULC (pending)			

Dimensions and Mounting Configurations

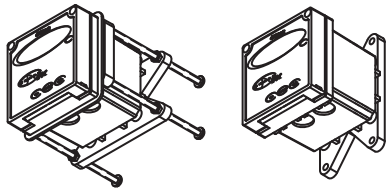
SHARK-TX

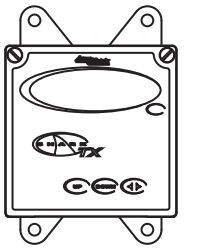
Universal Mount, NEMA 4X Enclosure, 4-20 Loop + 24 VDC Power

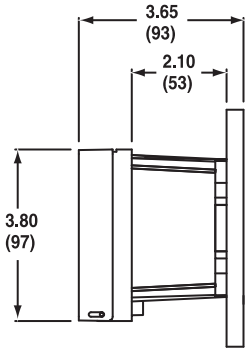


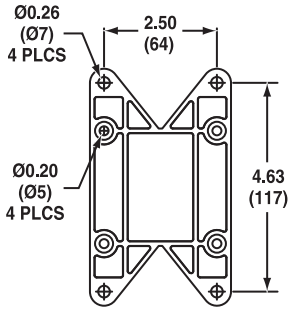


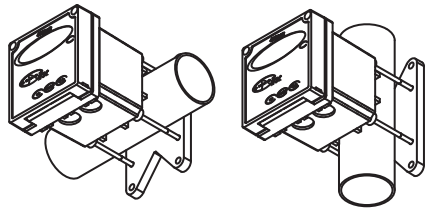
MOUNTING CONFIGURATIONS





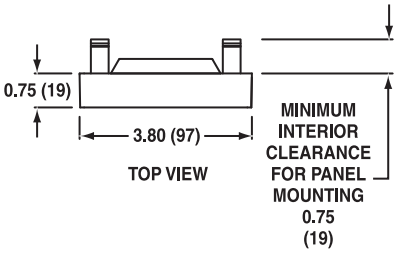


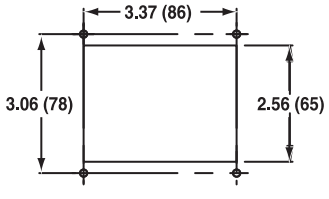




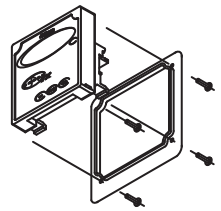
SHARK-TXP

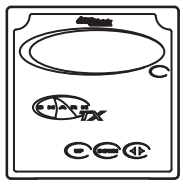
Panel Mount and DIN Rail Mount, NEMA 4X Front Panel, 4-20 Loop + 24 VDC Power

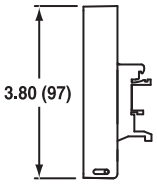


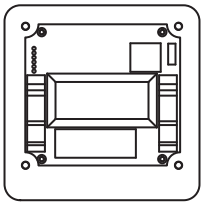


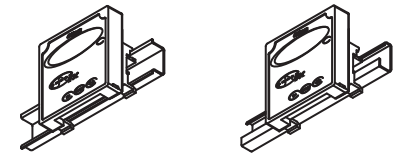
MOUNTING CONFIGURATIONS











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