TCSTX – Menu Driven Loop Powered Toroidal Conductivity Transmitter with 4 – 20mA Isolated Output and Local Display

- 4 – 20mA Isolated Output, Loop Powered 16 – 35VDC
- Large Dual Segmented High Content Display Indicates Conductivity & Process Temperature Simultaneously
- User-adjustable Temperature Compensation (0 – 4% / deg C)
- 4-Key Menu Driven, Field Selectable Ranges
- Adjustable Zero and Span
- Nema 4X Enclosure with Multiple Mounting Configurations

The model TCSTX is designed for on-line monitoring of water treatment applications and aggressive process chemicals. This 4-Key menu driven transmitter with local display is ideally suited for applications where 4 – 20mA signals are required and reliable instrumentation is critical.

Key features include the menu driven field selectable measuring ranges, large dual segment high content display, adjustable temperature compensation (% deg C), isolated output and reversible cell drive.

A NEMA 4X (IP66) enclosure provides excellent durability. A variety of mounting choices are available for wall, panel, pipe or rail installation.

Pair the TCSTX with a TCS-3020 toroidal sensor for trouble-free service. TCS-3020 sensors are offered in Noryl construction and can be mounted in a custom CPVC flow cell (p/n: FC95C) for in-line use.

Quality Sensors designed to meet your Process and Laboratory pH, ORP, Conductivity and DO requirements.

Parts covered by this product data sheet include:
TCSTX

Sensorex®

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Specifications-Transmitter

Full Scale Range:	0-2,000 uS / 2.000 mS / 20.00 mS / 200.0 mS / 2000 mS - User selectable
Sensitivity	0.05% of span or 0.1uS, whichever is greater
Repeatability	0.3% of span, or 0.1uS, whichever is greater
Non-linearity	0.3% of span or 0.1uS, whichever is greater
Zero Drift	<1% span per month, non-cumulative
Operating Conditions	-20 to 60deg C (-4 to 140 deg F) , 0-95% R.H. non-condensing conditions
Storage Conditions	-30 to 70deg C(-22 to 158 deg F), , 0-95% R.H. non-condensing conditions
Location	Designed for hazardous and non-hazardous areas
EMI/RFI Influence	Designed to EN 61326-1
Temperature Drift	Span or zero, 0.03% of range/degC
Stability	0.1% of span per 24 hours
Power Requirement	16-35V DC (2-wire device)
Warm-up Time	7 seconds to rated performance
Response time	6 seconds to 90% step input at lowest setting
Output Isolation	600 V galvanic isolation
Filter	Adjustable, 0-9.9 minutes additional dampening to 90% step input
Enclosure	NEMA 4X (IP66) polycarbonate, wall, pipe or DIN Rail mount. Weatherproof and corrosion resistant. Dimensions = 4.4" (112mm) H x 4.4'" (112mm) W x 3.5" (89mm) D.
Display	Large, high-contrast, Super-Twist(STN) LCD 4-digit main display with sign, 0.75" (19.1mm) seven-segment characters, 12-digit alpha-numeric second line display, 0.3" (7.6mm) 5 x 7 dot matrix characters
Keypad and	4-key membrane type with tactile feedback, polycarbonate with UV coating, integral EMI/RFI static shield conductively coated window.
Weight	1lb (0.45Kg)
Conduit Openings	2 each PG-9. Cord grips included.
Temperature Input	Selectable Pt100RTD or Pt1000RTD. ATC is user selectable 0-4%/Deg C
Maximum Cable Length	200ft. (61.0m)

Ordering Information

Part Number	Description
TCSTX	Loop-powered, 4-20mA toroidal conductivity transmitter (16-35VDC power supply not included)
TCS3020	Keyed Noryl toroidal conductivity sensor. Includes 20ft of cable and tinned wire terminations
FC95C	Keyed CPVC flow cell for TCS-2030. Includes nut and o-ring seal.

For more details on toroidal conductiviy sensors and flow cell, request toroidal conductivty sensor spec sheet or visit www.sensorex.com

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TCSTX

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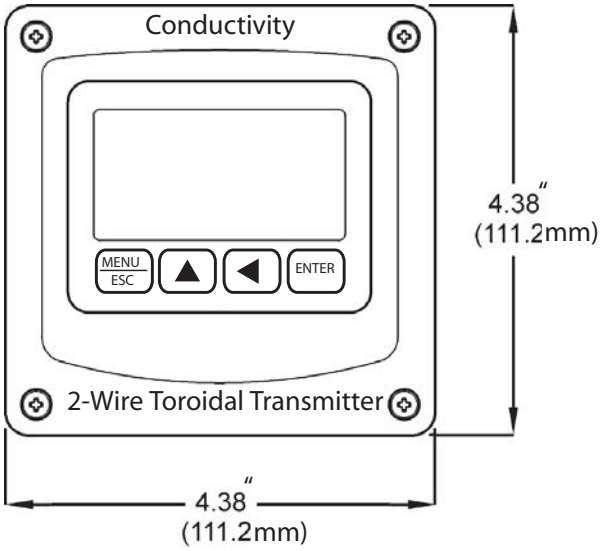
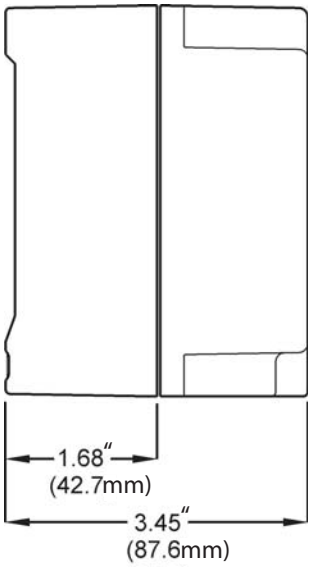
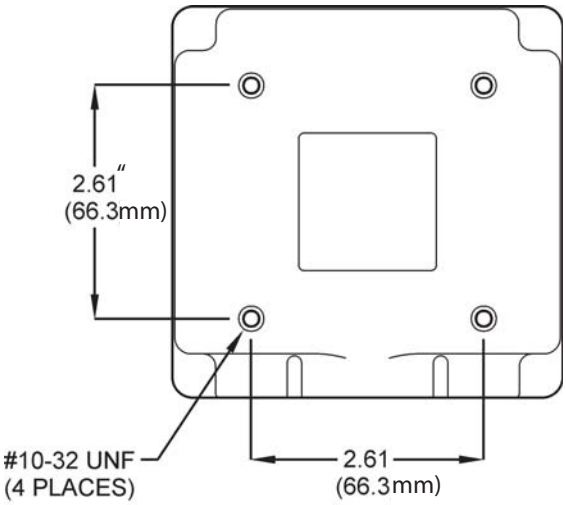
OUTLINE DRAWINGS OF TCSTX



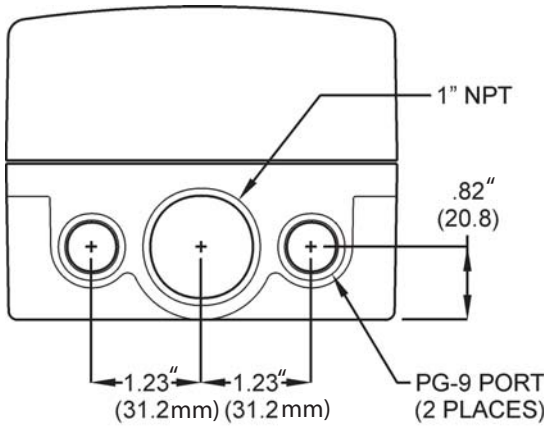
FRONT VIEW



SIDE VIEW



BACK VIEW



BOTTOM VIEW

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