

EX2000RS TOROIDAL/INDUCTIVE CONDUCTIVITY TRANSMITTER

PRODUCT SPECIFICATION SHEET



The Sensorex EX2000RS is a toroidal conductivity transmitter with an RS-485 serial interface (MODBUS RTU or ASCII) for use with the TCS3020 Toroidal Conductivity Sensor. Large LCD screen with brilliant illumination graphically displays up to four weeks of conductivity and concentration measurements, plus allows you to see how your measurements are trending in real-time. Records up to 50 records of important events and diagnostic error readings. Easy installation with versatile mounting options for wall or panel mount.

Applications in Wastewater, Cooling Towers, Brine, Desalination, Wet Scrubbers, Chemical Processing, and any other high conductivity scenario where a rugged, nonfouling conductivity monitoring system with minimal maintanence requirements is desirable.

RANGES

Parameter	Range	Resolution	Accuracy
Conductivity	0.0 μ/cm~2000 mS/ cm (auto)	0.1µS/cm, 0.001mS/cm, 0.01mS/cm, 0.1mS/cm, 1mS/cm	± 1% ± 1 digit
Temperature	-30-130°C NTC30K; -30-200°C PT1000	0.1°C	± 0.1°C ± 1 digit

Compatible with TCS3020 Toroidal Conductivity Sensor

Monitors Conductivity, TDS, Concentration, and Salinity

RS-485 Serial Interface (MODBUS RTU or ASCII)

Versatile mounting options (wall or panel)

SPECIFICATIONS

Temperature Compensation	NTC-30K/PT-1000 Auto or Manual adjustment
Calibration Mode	(1) Manual cell constant adjustment(2) Standard solution calibration(3) Zero-point calibration
Temperature Coeffecient	Linear temperature compensation from 0.00%~40.0%, non-linear compensation, off compensation
Operating Temperature	0~50°C
Storage Temperature	-20~70°C
Analog Output 1	Isolated DC 0/4-20mA corresponding to main measurement, max load 500Ω
Serial Interface	RS-485 (MODBUS RTU or ASCII)
Modbus Communication	Measuring value, calibration data, product adjustment, logbook, parameter readout, selection
Logbook	50 event records
Display	LCM with auto/manual illumination, text mode (numerical display), chart mode (3 min realtime dynamic graph for cond and concentration), trace mode (3 min-4 weeks of measured value trend graph for cond and concentration)
Power Supply	100~240VAC ±10, 50/60Hz, 7W max
Installation	Wall or Panel Mount
Case	IP65 (NEMA 4X)
Dimensions	3.8" (96mm) x 3.8" (96mm) x 5.2" (132mm); 1/4 DIN
Cutout Dimensions	3.66" (93mm) x 3.66" (93mm)

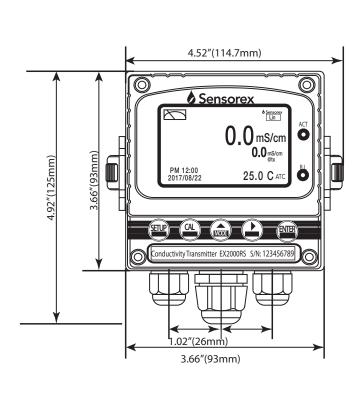
RANGES (CONT.)

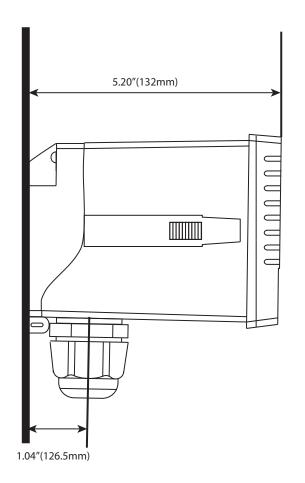
Parameter	Range	Resolution	Accuracy
TDS	0 ppm~19999 ppm; 0.00~199.9 ppt	-	-
Salinity	0.0 ppt~70.0 ppt	-	-
	Compound	Range	Resolution
Concentration	NaCl	0~28%	0.01%
	HCl	0~18% 22-39%	0.01%
	HNO ₃	0~30% 35~96%	0.01%
	NaOH	0~24% 15~50%	0.01%
	H ₂ SO ₄	0~37% 28~88% 89-99%	0.01%
	H ₃ PO ₄	0~35%	0.01%

SPECIFICATIONS (CONT.)

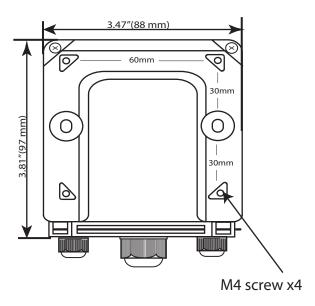
Setting	Contact	240VAC, 0.5A max (recommended)
	Activate	Hi/Lo, Hi/Hi, Lo/Lo selectable two limited programmable, ON/OFF
Wash	Contact	240VAC, 0.5A max (recommended)
	Time	ON: 0~99min.59sec / OFF: 0~999 hours.59 min
Weight		1.1lb (0.5kg)

DIMENSIONAL VIEWS





DIMENSIONAL VIEWS (CONT.)



ORDERING INFORMATION

Toroidal Conductivity Transmitter with RS-485 serial interface

TCS3020/
PIK/20/TL/TL

Noryl Toroidal Sensor with 20-30 windings

Flow cell 2" slip connections for use with TCS3020/PIK/20/TL/TL