

Signet 8850 Conductivity/Resistivity Transmitters



Check out the 9900 Transmitter for your single channel needs

Member of the ProcessPro® Family of Instruments



Panel Mount



Pipe, Tank, Wall and Integral Mount

The Signet 8850 Conductivity/Resistivity Transmitter is designed for multiple installation capabilities, simple set-up and easy operation, thus satisfying a broad range of application requirements.

The 8850 comes equipped with two 4 to 20 mA loop outputs and two open collector relays. It is offered with a NEMA 4X/IP65 front panel with a self-healing window in a convenient 1/4 DIN package for easy mounting. The 8850 can be configured via a simple menu system.

In addition to programmable outputs and relays, the unit can also be set up to measure raw conductivity values.

Features

- Display choices of μS , mS, K Ω , M Ω , PPM (TDS)
- Simulate function
- Programmable temperature compensation
- Two open collectors
- Dual output option allows temperature and process signal transmission
- NEMA 4X/IP65 enclosure with self-healing window
- Compatible with ALL Signet conductivity electrodes



Applications

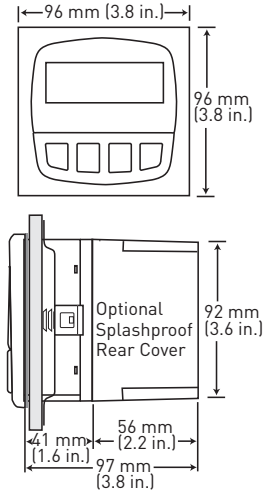
- RO/DI System Control
- Rinse Tank Control
- Cooling Tower, Scrubber or Blowdown Control
- Environmental Study (TDS)
- Desalination Monitor
- Water Quality Monitoring
- Leak Detection
- Chemical Concentration

Specifications

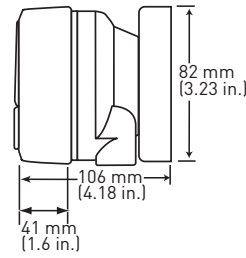
General			
Compatible Electrodes		All Signet conductivity/resistivity electrodes	
Sensor Input Range			
	Conductivity	0.055 to 400,000 $\mu\text{S}/\text{cm}$	
	Resistivity	10 $\text{K}\Omega\cdot\text{cm}$ to 18.2 $\text{M}\Omega\cdot\text{cm}$	
	TDS	0.023 to 200,000 ppm	
	Temperature	PT1000	-25 °C to 120 °C -13 °F to 248 °F
Accuracy			
	Conductivity/Resistivity	$\pm 2\%$ of reading	
	Temperature	± 0.75 °C	
Display			
	Contrast	User selected, 5 levels	
	Update Rate	1.8 seconds	
Materials			
Case		PBT	
Keypad		Sealed 4-key silicone rubber	
Panel and Case Gasket		Neoprene	
Window		Polyurethane coated polycarbonate	
Electrical			
Power		12 to 24 VDC $\pm 10\%$ regulated	
		100 mA max.	
Current Output		Dual 4 to 20 mA, isolated, passive, fully adjustable and reversible	
Max. Loop Impedance		50 Ω max. @ 12 V	
		325 Ω max. @ 18 V	
		600 Ω max. @ 24 V	
Update Rate		200 ms	
Accuracy		± 0.03 mA @ 25°C, 24 V	
Open Collector Output		High, Low, Pulse, Off	
	Max. Voltage Rating	50 mA max sink, 30 VDC max	
	Hysteresis	User adjustable	
		Max 400 pulses/min.	
Environmental			
Operating Temperature		-10 °C to 70 °C	14 °F to 158 °F
Storage Temperature		-15 °C to 80 °C	5 °F to 176 °F
Relative Humidity		0 to 95%, non-condensing	
Enclosure		NEMA 4X/IP65 (front face only on panel mount); field mount is 100% NEMA 4X/IP65	
Shipping Weight			
		0.6 kg	1.32 lb
Standards and Approvals			
		CE, FCC, UL, CUL	
		RoHS compliant, China RoHS	
		Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management and OHSAS 18001 for Occupational Health and Safety	

Dimensions

3-8850-XP Panel Mount






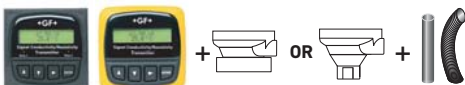
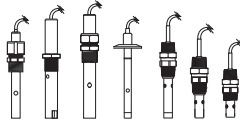
Field Version with Universal Mounting Kit



System Overview

In-Line Installation

Submersible Installation

Panel Mount	Pipe, Tank, Wall Mount	Field (Integral) Mount	Panel or Field Mount - Pipe, Tank, Wall
Signet 8850 Conductivity/Resistivity Instrument 	Signet 8850 Conductivity/Resistivity Instrument 	Signet 8850 Conductivity/Resistivity Instrument 	Signet 8850 Conductivity/Resistivity Instrument with 3-8050 Universal Mount Kit or 3-8052 Integral Mount Kit and Pipe extension or conduit with 3/4 in. FNPT threads* 
Signet Electrodes 2818-2823 2839-2842 Caution: When using 0.01 cells, do not exceed 15 feet of cable length 			
In-Line Installation - Customer supplied 3/4 in. NPT Fittings			All sold separately

Note: Submersible installation not applicable for Sanitary Conductivity Electrode.

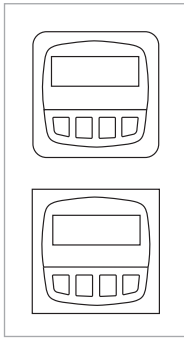
*Refer to the Signet Submersion Kit brochure (3-0000.707) located on our website for installation suggestions and options.

Ordering Notes

- 1) Instruments can be mounted directly to a sensor
- 2) Use the universal mount kit (3-8050) with the field mount instrument to mount to a pipe, tank or wall.
- 3) To mount the panel version to a wall, use the heavy duty wall mount bracket.

Please refer to **Wiring, Installation, and Accessories** sections for more information.

Ordering Information



Mfr. Part No.	Code	Input	Output	Power
Conductivity/Resistivity Transmitter				
Integral mount package				
3-8850-3	159 000 232	One	Two 4 to 20 mA outputs and 2 open collectors	4 wire
Panel mount package				
3-8850-3P	159 000 233	One	Two 4 to 20 mA outputs and 2 open collector	4 wire

Accessories and Replacement Parts

Mfr. Part No.	Code	Description
Mounting		
3-8050	159 000 184	Universal mounting kit
3-8050.395	159 000 186	Splashproof rear cover (panel mount only)
3-8052	159 000 188	¾ in. integral mounting kit
3-8052-1	159 000 755	¾ in. NPT mount junction box
3-0000.596	159 000 641	Heavy duty wall mount bracket (panel mount only)
3-5000.399	198 840 224	Panel adapter, 5 x 5 in. to ¼ DIN
3-5000.598	198 840 225	Surface mount bracket (panel mount only)
3-8050.392	159 000 640	¼ DIN retrofit adapter
3-9900.396	159 001 701	Angle adjustment adapter kit
Liquid Tight Connectors		
3-9000.392	159 000 368	Liquid tight connector kit for rear cover (3 connectors)
3-9000.392-1	159 000 839	Liquid tight connector kit, NPT (1 connector)
3-9000.392-2	159 000 841	Liquid tight connector kit, PG 13.5 (1 connector)