Signet 8350 Temperature Transmitters

+GF+

Check out the 9900 Transmitter for your single channel needs

Member of the ProcessPro® Family of Transmitters

Panel Mount

Pipe, Wall, Tank and Integral Mount

The Signet 8350 Temperature Transmitter offers local or remote display with current and relay outputs. This model offers exceptional repeatability and accuracy over a wide operating temperature range. Configurations include open collector outputs or mechanical relays with status indicators for process control or alarming.

The unit also has the ability to accept other temperature sensors which have 4 to 20 mA output via the Signet 8058 Signal Converter. The chemical resistant NEMA 4X/IP65 front face is found on both the highly visible field mount or black panel mount instruments with a self-healing window and a standard 1/4 DIN cutout. Dual input version allows difference calculation (ΔT) and offers cost savings with independent dual outputs. All models offer an output simulation function for complete system testing.

Features

- **Digital (S³L) input for stable & reliable reading**

- **Available with single or dual input**

- **Field scaleable 4 to 20 mA output**

- **Displays temperature and mA output**

- **Temperature display in degrees Celsius (°C) or Fahrenheit (°F)**

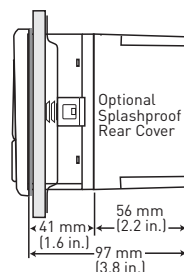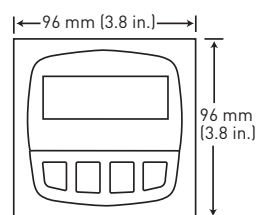- **Choice of relay or open collector output**

- **NEMA 4X/IP65**

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Applications

- **Process Temperature Monitoring**
- **Plating Bath Temperature Control**
- **Heat Exchange Monitor**
- **R.O. or D.I. Monitoring**
- **Hot/Cold Mixing System Monitoring**
- **Data Acquisition**
- **Cooling Loops**
- **Effluent Monitoring**
- **HVAC**
- **Chemical Processing**

Specifications
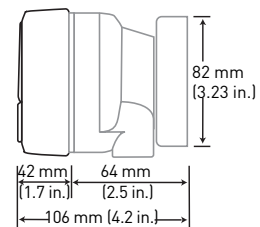
General		
Compatibility	Signet 2350 Temperature Sensor versions w/digital output or third-party sensors with 4 to 20 mA output (via Model 8058)	
Accuracy (based on 2350)	±0.5 °C	±0.9 °F
Display	Alphanumeric, 2 x 16 dot matrix LCD	
Update Rate	1 second	
Contrast	User selected, 5 levels	

Materials		
Enclosure	PBT	
Keypad	Sealed 4-key silicone rubber	
Panel and Case Gasket	Neoprene	
Window	Polyurethane coated polycarbonate	

Electrical		
Power		12 to 24 VDC ±10% regulated
	-1	21 mA max.
	-2	200 mA max.
	-3	31 mA max.
Current Output		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
Relay Outputs		High, Low, Pulse, Off
Mechanical SPDT contacts		
Maximum Voltage Rating		5 A @ 30 VDC, 5 A @ 250 VAC resistive load
Hysteresis		User adjustable
Open-Collector Output		High, Low, Pulse, Off
		Optically isolated, 50 mA max, sink, 30 VDC max. with pull-up resistor
Hysteresis		User adjustable
		Maximum 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		
	0.325 kg	0.8 lb

Standards and Approvals	
	CE, UL, CUL
	RoHS compliant
	China RoHS
	Manufactured under ISO 9001 for Quality and ISO 14001 for Environmental Management

Dimensions

3-8350-XP Panel Mount

96 mm (3.8 in.)

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Optional Splashproof Rear Cover

41 mm (1.6 in.)

56 mm (2.2 in.)

97 mm (3.8 in.)
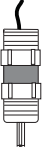
Field Version with Universal Mount

82 mm (3.23 in.)

42 mm (1.7 in.)

64 mm (2.5 in.)

106 mm (4.2 in.)

System Overview

	Panel Mount	Field Mount - Pipe, Tank, Wall	4 to 20 mA input	Integral Mount
	Signet 8350 Temperature Transmitter	**Signet 8350 Temperature Transmitter** with 3-8050 Universal Mount Kit	Customer Supplied Chart Recorder Programmable Logic Controller	**Signet 8350 Temperature Transmitter** with 3-8052 Integral Mount Kit

Signet Sensor 2350

All sold separately

In-Line Installation - Customer supplied fittings

Submersible Installation - Customer supplied pipe extension or conduit with 3/4 in. FNPT threads*

*Refer to the Signet Submersion brochure located in the K-Factors Fittings and More Kit (3-0000-709) for installation suggestions and options.

8058 signal converter & 8059 external relay module also compatible

Ordering Notes

1) Field mount instruments can be mounted with a sensor in an integral configuration by choosing the following:
- Order integral adapter kit PN 3-8052 (sold separately) to connect the transmitter directly onto the sensor.
2) An optional splashproof rear cover can be ordered separately if needed.

3) Use the universal mounting kit with the field mount transmitter to mount to a pipe, tank or wall.
4) To mount panel version on a wall, use heavy duty wall mount bracket.
5) Order RC filter kits to protect relays from voltage spikes.
6) Panel cutout should be 92 mm X 92 mm (3.62 in X 3.62 in.).

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

Ordering Information
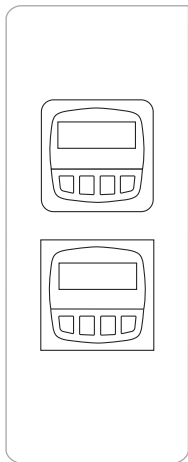
Mfr. Part No.	Code	Input, Output, Power
Level Transmitter		
Field mount or pipe, wall, tank, or integral mounting		
3-8350-1	**159 000 192**	One input with 4 to 20 mA output and one open collector; uses 2 wire power
3-8350-2	**159 000 194**	One input with 4 to 20 mA output and two relays; uses 4 wire power
3-8350-3	**159 000 196**	Two inputs with two 4 to 20 mA outputs and 2 open collectors; uses 4 wire power
Panel mount with mounting bracket and panel gasket		
3-8350-1P	**159 000 193**	One input with 4 to 20 mA output and one open collector; uses 2 wire power
3-8350-2P	**159 000 195**	One input with 4 to 20 mA output and two relays; uses 4 wire power
3-8350-3P	**159 000 197**	Two inputs with two 4 to 20 mA outputs and 2 open collectors; uses 4 wire power

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 w/one liquid tight connector and cap with terminal block
3-0000.596	**159 000 641**	Heavy duty wall mount bracket (panel mount only)
3-5000.598	**198 840 225**	Surface mount bracket (panel mount only)
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)
Other		
3-8050.396	**159 000 617**	RC filter kit (for relay use) - 2 per kit
3-8058-1S	**special order**	4 to 20 mA to digital signal converter, single input, loop powered
3-8058-2S	**special order**	4 to 20 mA to digital signal converter, dual input, loop powered