

Signet 8350 Temperature Transmitters



Member of the Process Pro® family of Transmitters



Panel Mount



Pipe, Wall, Tank and Integral Mount

Features

- Digital (S³L) input for stable & reliable reading
- Available with single or dual input
- Field scaleable 4 to 20mA output
- Displays temperature and mA output
- Temperature display in degrees Celcius (°C) or Farenheit (°F)
- Choice of relay or open collector output
- NEMA 4X/IP65

Application

- 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

Description

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 relays with status indicators for process control or alarming. The unit also has the ability to accept other temperature sensors which have 4 to 20mA 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 capable of difference calculation and output. All models offer an output simulation function for complete system testing.

System Overview

In-Line Installation			Submersible Installation*
Panel Mount Signet 8350 Temperature Transmitter 	Pipe, Tank, Wall Mount Signet 8350 Temperature Transmitter 	Integral Mount Signet 8350 Temperature Transmitter 	Panel, Pipe, Tank, Wall Mount Signet 8350 Temperature Transmitter
	Signet Universal Adapter Kit (3-8050) (sold separately) 	Signet Integral Adapter Kit (3-8052) (sold separately) 	Pipe extension or conduit with 3/4 in. FNPT threads
Signet 2350 Temperature Sensor (sold separately) 	Signet 2350 Temperature Sensor (sold separately) 	Signet 2350 Temperature Sensor (sold separately) 	Signet 2350 Temperature Sensor (sold separately)
Fittings - Customer supplied			



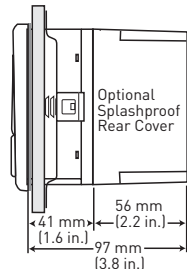
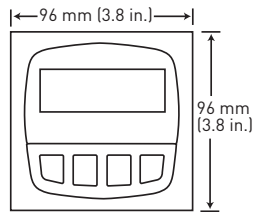
8058 signal converter also compatible

*For submersible pipe, tank or wall mount installations, user must use the Universal Adapter Kit (3-8050).

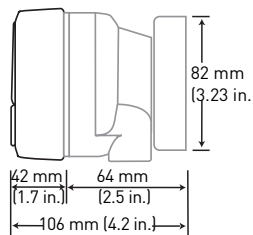


Dimensions

3-8350-XP



Field version with universal mount



Model 8350

Ordering Notes:

- 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.
- An optional splashproof rear cover can be ordered separately if needed.
- Use the universal mounting kit with the field mount transmitter to mount to a pipe, tank or wall.
- To mount panel version on a wall, use heavy duty wall mount bracket.
- Order RC filter kits to protect relays from voltage spikes.

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

Specifications

General

Compatibility:

Signet 2350 Temperature Sensor versions w/digital output or other sensors with 4 to 20mA output (via Model 8058)

Accuracy: $\pm 0.5^{\circ}\text{C}$ ($\pm 0.9^{\circ}\text{F}$)

Display

- Alphanumeric, 2 x 16 dot matrix LCD
- Update rate: 1 second
- Contrast: User selected, 5 levels

Materials

- Case: PBT
- Panel case gasket: Neoprene
- Window: Polyurethane coated polycarbonate
- Keypad: Sealed 4-key silicone rubber

Electrical

Power: 12 to 24 VDC $\pm 10\%$ regulated

- [-1] 21 mA max.
- [-2] 200 mA max.
- [-3] 31mA max.

Sensor input range:

-10°C to 100°C (14°F to 212°F)

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

Electrical (continued)

Relay output

- Mechanical SPDT contacts: Hi, Lo, Pulse, Off
 - Maximum voltage rating: 5 A @ 30 VDC, 5 A @ 250 VAC resistive load
 - Hysteresis: User adjustable
 - Maximum 400 pulses/min.
- Open-collector output
- Hi, Lo, Pulse, Off
 - Open-collector, optically isolated, 50mA max, sink, 30 VDC max. w/pull-up resistor
 - Hysteresis: User adjustable
 - Maximum 400 pulses/min.

Environmental

Enclosure Rating: NEMA 4X/IP65 front

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

Shipping Weight: 0.325 kg (0.8 lbs.)

Standards and Approvals

- CE, UL listed
- Manufactured under ISO 9001:2000 for Quality and ISO 14001:2004 for Environmental Management

Ordering Information

Instrument Part Number	
3-8350	Temperature Transmitter
	Input(s), outputs, and Power - Choose one
-1	One input with 4 to 20 mA output and one open collector; uses 2 wire power
-2	One input with 4 to 20 mA output and two relays; uses 4 wire power
-3	Two inputs with two 4 to 20 mA outputs and 2 open collectors; uses 4 wire power
	Field or panel mount - Choose one
-	Field mount for pipe, wall, tank, or integral mounting
P	Panel mount with mounting bracket and panel gasket
3-8350	-1 P Example Part Number

Mfr. Part No.	Code	Mfr. Part No.	Code
3-8350-1	159 000 192	3-8350-2P	159 000 195
3-8350-1P	159 000 193	3-8350-3	159 000 196
3-8350-2	159 000 194	3-8350-3P	159 000 197

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
3-8052	159 000 188	3/4 in. Integral mounting kit
3-8052-1	159 000 755	3/4 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 (for panel mount only)
3-5000.598	198 840 225	Surface Mount Bracket
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 piece)
3-9000.392-2	159 000 841	Liquid tight connector kit, PG13.5 (1 piece)
Other		
3-8058-1S	special order	4 to 20mA to digital signal converter, single input, loop powered
3-8058-2S	special order	4 to 20mA to digital signal converter, dual input, loop powered
3-8050.396	159 000 617	RC Filter kit (for relay use) - 2 per kit