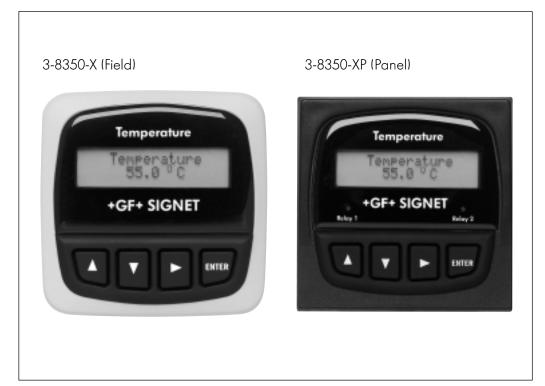
# +GF+ SIGNET 8350 Temperature Transmitters



## Description

The +GF+ SIGNET 8350 Temperature Transmitter converts the signal from the +GF+ SIGNET 2350 temperature sensor into a 4 to 20mA signal. Offers exceptional repeatability and accuracy over a wide operating temperature range. Configurations include open collector outputs or relays for process control or

alarming. Chemical resistant NEMA 4X/IP65 packaging options include highly visible field mount or black panel mount with standard 1/4 DIN cutout. Dual input version allows difference calculation ( $\Delta$ T) and offers cost savings with independent dual outputs capable of difference calculation and output.

## **Technical Features**

Mounting Version	Part No.	Wire Power	Sensor Input	4 to 20 mA Output	Open Collector/ Relay
Field	3-8350-1	2	1	1	1 O.C. Hi, Lo, Pulse or Off
	3-8350-2	4	1	1	2 Relays Hi, Lo, Pulse or Off
	3-8350-3	4	2	2 Sensor 1, Sensor 2 or delta T	2 O.C.'s Hi, Lo, Pulse or Off
Panel	3-8350-1P	2	1	1	1 O.C. Hi, Lo, Pulse or Off
	3-8350-2P	4	1	1	2 Relays Hi, Lo, Pulse or Off
	3-8350-3P	4	2	2 Sensor 1, Sensor 2 or delta T	2 O.C.'s Hi, Lo, Pulse or Off

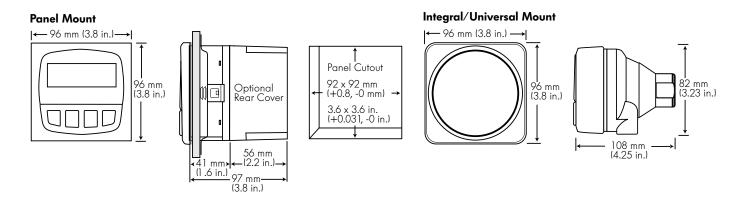
## Features

- S<sup>3</sup>L Input
- Field Scaleable
- Temperature and mA loop indication
- Deg. C or Deg. F
- Output Simulation function for complete system testing
- Dual sensor input option with difference calc.
- Relay option with status indicators
- 2 x 16 character dot matrix LCD
- NEMA 4X/IP65 enclosure and self-healing window

## Application

- Process temperature monitoring
- Plating Bath Temperature Control
- Heat Exchange Monitor
- R.O. system monitor
- DI system monitor
- Hot/Cold Mixing system monitor
- Data Acquisition
- Cooling loops
- Effluent monitoring
- HVAC
- Chemical Processing

## **Dimensions**



### Installation

The transmitter is available in a panel mount or a field version. Select either the universal mount kit (3-8050) to mount the transmitter on a surface near the sensor or select the integral mount kit (3-8052) to mount the transmitter onto the sensor.

### 1. Panel Mount

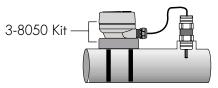
3-8350-XP



All panel mount transmitters

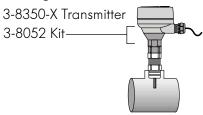
### 2. Universal Mount

3-8350-X Transmitter

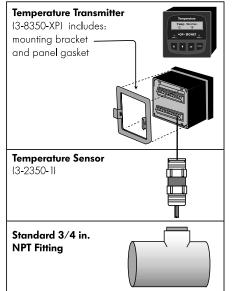


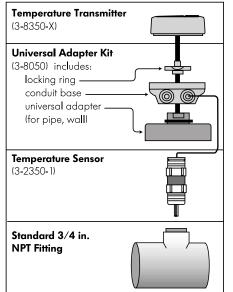
The Universal Mount Kit (3-8050) includes a conduit base, locking ring, and universal adapter for mounting the transmitter on a pipe, wall, or other stationary surface.

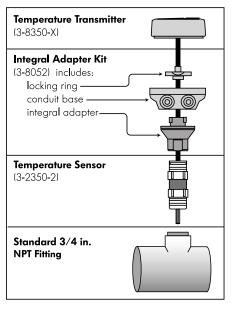
### **3. Integral Mount**



The Integral Mount Kit (3-8052) includes a conduit base, locking ring, and integral adapter for mounting the transmitter and sensor directly onto a pipe.

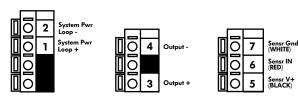






(3-8350-XP) include everything for panel installation. Panel mount transmitters fit into a standard 1/4 DIN panel cutout.

## **Rear Terminal View**



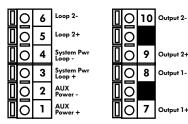
9 Output 2+

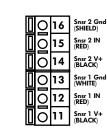
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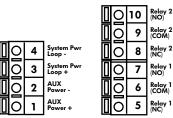
7 Output 1+

Output 1-

Terminal 8350-1









Terminal 8350-2

Note: The terminal blocks are not labeled on the back of the unit. An adhesive label is supplied with terminal descriptions to serve as a remote terminal display.

Terminal 8350-3

## **Technical Data**

### General

Compatibility: +GF+ SIGNET 3-2350 **Temperature Sensors** 

Accuracy: ±0.5°C

Enclosure:

- Rating: NEMA 4X/IP65 front •
- Case: PBT
- Panel case gasket: Neoprene •
- ٠ Window: Polyurethane coated polycarbonate
- Keypad: • Sealed 4-key silicone rubber Display:
- Alphanumeric 2 x 16 LCD •
- Update rate: 1 second •

Contrast: User selected, 5 levels Shipping Weight: 0.325 kg (0.8 lbs.)

### Environmental

Operating temperature: -10 to 70°C (14 to 158°F) Storage temperature: -15 to 80°C (5 to 176°F) Relative humidity: 0 to 95%, non-condensing

### **Standards and Approvals**

- CE, UL listed
- Manufactured under ISO 9001 and • ISO 14001

### Electrical

Power:

12 to 24 VDC  $\pm$  10% regulated (-1) 21 mA max.: (-2) 200 mA max.: (-3) 31mA max.

Sensor input:

- Range: -10 to 100°C
- Current output:
- 4 to 20 mA, isolated, fully adjustable and reversible
- Max loop impedance: 50Ω max. @ 12 V 325Ω max. @ 18 V 600Ω max. @ 24 V
- Update rate: 200 ms
- Accuracy: ±0.03 mA

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
- Max 400 pulses/min.
- Open-collector output: Hi, Lo, Pulse, Off
- Open-collector, optically isolated, 50 mA max, sink, 30 VDC max. pull-up voltage.
- Hysteresis: User adjustable
- Max 400 pulses/min.

### **Ordering Information**

Accessories

Mfr. Part No.	Code	Description
3-8350-1	159 000 192	Temp transmitter, Field mount
3-8350-1P	159 000 193	Temp transmitter, Panel mount
3-8350-2	159 000 194	Temp transmitter, Field mount with relays
3-8350-2P	159 000 195	Temp transmitter, Panel mount with relays
3-8350-3	159 000 196	Temp transmitter, Field mount with dual input/output
3-8350-3P	159 000 197	Temp transmitter, Panel mount with dual input/output

ACCESSONES		
Mfr. Part No.	Code	Description
3-8050	159 000 184	Universal mounting kit
3-8050.395	159 000 186	Transmitter NEMA 4X 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
3-8050.396	159 000 617	RC Filter kit (for relay use)
3-0000.596	159 000 641	Heavy duty wall mount bracket
3-5000.598	198 840 225	Surface Mount Bracket
3-9000.392	159 000 368	Liquid tight connector kit for rear cover (includes 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)

### **Engineering Specifications**

- The transmitter shall be UL and CE listed.
- The transmitter shall be manufactured under ISO 9001 and ISO 14001 certified processes.
- The transmitter shall be field or panel mountable.
- The temperature shall be displayed in °C or °F.
- The device shall meet NEMA 4X and IP65 standards.
- The operating voltage shall be 12 to 24 VDC.
- The transmitter shall have an isolated 4 to 20 mA output with an open collector output, 5 to 30 VDC or a 4 to 20 mA output with 2 relays or a 4 to 20 mA output with dual open collector with delta capability.
- The transmitter shall have hold and simulate capability.
- The transmitter shall be +GF+ SIGNET 8350 Temperature Transmitter.