

# +GF+ SIGNET 8550 ProcessPro™ Flow Transmitter



## Features

- Permanent & resettable totalizers
- Scaleable outputs
- Relay options
- Mounting versatility
- Simulate function
- 2 x 16 character dot matrix LCD
- Chemical resistant enclosure and self-healing window
- Large pushbuttons
- Clearly marked terminal labels

## Application



- Flow control and monitoring
- Filtration or softener regeneration
- Effluent totalization
- Pump protection
- Feed pump pulsing
- Ratio control
- Water distribution
- Leak detection

## Description

The +GF+ SIGNET 8550 Flow Transmitter is an advanced solution that converts the signal from all +GF+ SIGNET flow sensors into a 4 to 20 mA signal for long distance transmission, and offers the unique feature of dual input and output capability. Configuration flexibility is maximized with two optional relays for

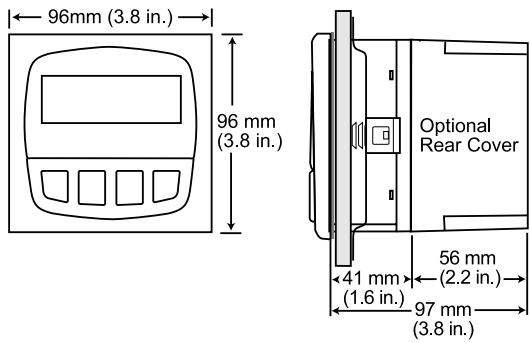
process control, two packaging options for integral/pipe mount or panel installation, and scalability for virtually any flow range or engineering unit. State-of-the-art electronic design ensures long-term reliability, signal stability, and simple user setup and operation.

## Technical Features

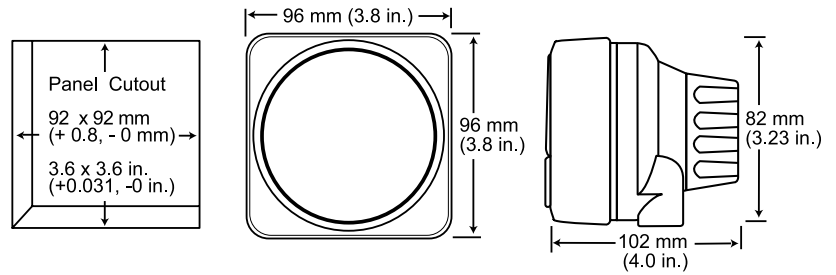
Mounting Version	Part No.	Wire Power	Sensor Input	4 to 20 mA Output	Open Collector/Relay
<b>Field</b> 	3-8550-1	2/4 non-powered and powered sensors	1	1	1 O.C. Hi, Lo, Pulse Freq or Off
	3-8550-2	4 non-powered and powered sensors	1	1	2 Relays Hi, Lo, Pulse or Off
	3-8550-3	2/4 non-powered and powered sensors	2	2 Sensor 1, Sensor 2 or delta Flow	2 O.C.'s Hi, Lo, Pulse Freq or Off
<b>Panel</b> 	3-8550-1P	2/4 non-powered and powered sensors	1	1	1 O.C. Hi, Lo, Pulse Freq or Off
	3-8550-2P	4 non-powered and powered sensors	1	1	2 Relays Hi, Lo, Pulse or Off
	3-8550-3P	2/4 non-powered and powered sensors	2	2 Sensor 1, Sensor 2 or delta Flow	2 O.C.'s Hi, Lo, Pulse Freq or Off

# Dimensions

## Panel Mount



## Integral/Universal Mount

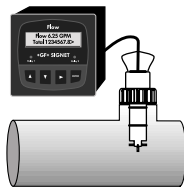


# Installation

The transmitter is available in a panel mount or a field version. The field version is mounted to the sensor using the integral mount kit (3-8051) or you may select the universal mount kit (3-8050) to mount the transmitter on a surface near the sensor.

## 1. Panel Mount

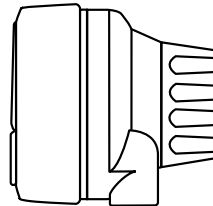
3-8550-XP



All panel mount transmitters (3-8550-XP) include a mounting bracket and gasket for a NEMA 4X watertight panel installation. Panel mount transmitters fit into a standard 1/4 DIN panel cutout.

## 2. Integral Mount

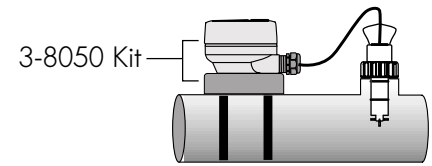
3-8051 Kit



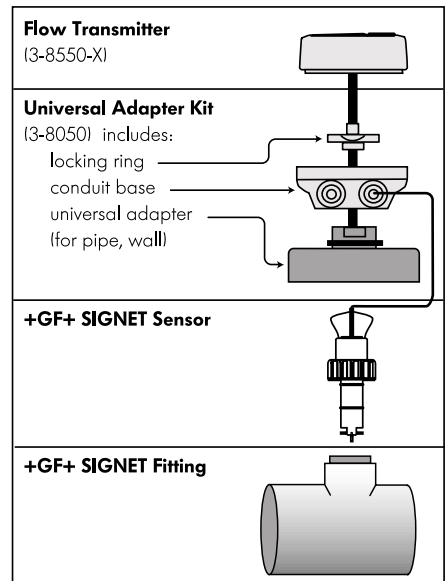
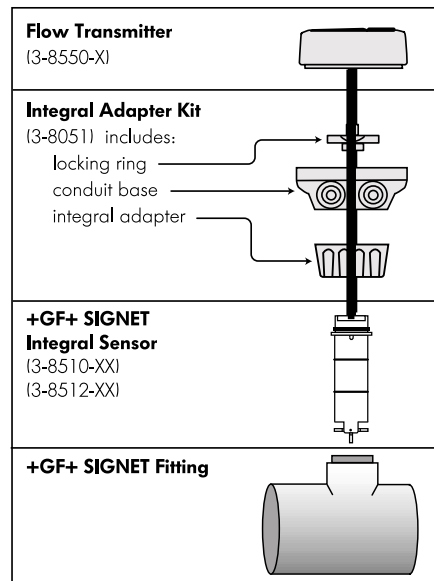
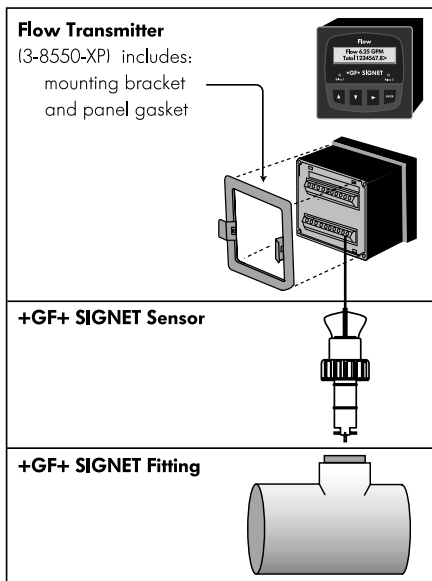
The Integral Mount Kit (3-8051) can be ordered separately and includes a conduit base, locking ring, and integral adapter for mounting the transmitter and sensor directly in a pipe.

## 3. Universal Mount

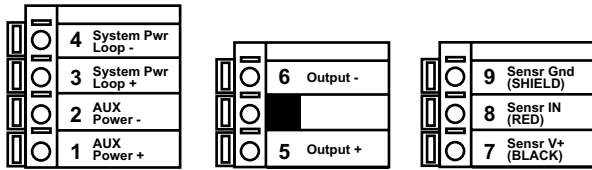
3-8550-X Transmitter



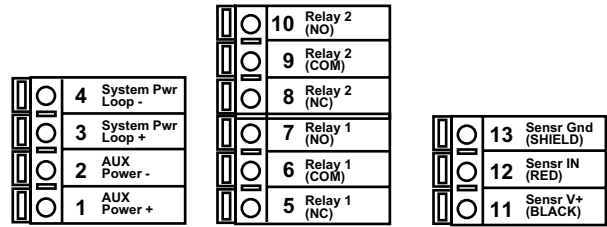
The Universal Mount Kit (3-8050) can be ordered separately and includes a conduit base, locking ring, and universal adapter for mounting the transmitter on a pipe, wall, or other stationary surface.



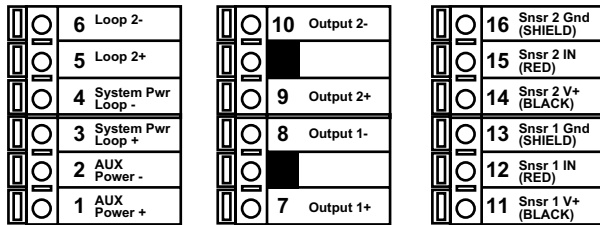
## Rear Terminal View



3. terminal 8550-1



3. terminal 8550-2



3. terminal 8550-3

## Technical Data

### General

Compatibility:

+GF+ SIGNET Flow Sensors with frequency outputs

Accuracy:  $\pm 0.5\%$  of reading @ 25°C

Enclosure:

- Rating: NEMA 4X/IP65 front
- Case: PBT
- Panel Case Gasket: Neoprene
- Window: Polyurethane coated polycarbonate
- Keypad: Sealed 4-key silicone rubber
- Weight: Approx. 325g (12 oz.)

Display:

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

### 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

- CSA, CE, UL listed
- Manufactured under ISO 9001

### Electrical

Power:

- 12 to 24 VDC  $\pm 10\%$ , regulated
- (-1) 61 mA max.; (-2) 200 mA max.; (-3) 122 mA max.

Sensor Input:

- Range: 0.5 to 1500 Hz
- Sensor power:
  - 2-wire: 1.5 mA @ 5 VDC  $\pm 1\%$
  - 3 or 4 wire: 20 mA @ 5 VDC  $\pm 1\%$
- Optically isolated from current loop
- Short circuit protected

Current output:

- 4 to 20 mA, isolated, fully adjustable and reversible
- Max loop impedance:
  - 50 $\Omega$  max. @ 12 V,
  - 325 $\Omega$  max. @ 18 V,
  - 600 $\Omega$  max. @ 24 V
- Update rate: 100 ms
- Accuracy:  $\pm 0.03$  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 300 pulses/min.

Open-collector output: Hi, Lo, Pulse, Off

- Open-collector, optically isolated, 50 mA max. sink, 30 VDC max. pull-up voltage.
- Max 300 pulses/min.

## Ordering Information

<b>Mfr. Part No.</b>	<b>Code</b>	<b>Description</b>
3-8550-1	159 000 047	Flow transmitter, Field mount
3-8550-1P	159 000 048	Flow transmitter, Panel mount
3-8550-2	159 000 049	Flow transmitter, Field mount with relays
3-8550-2P	159 000 050	Flow transmitter, Panel mount with relays
3-8550-3	159 000 051	Flow transmitter, Field mount with dual input/output
3-8550-3P	159 000 052	Flow transmitter, Panel mount with dual input/output

## Accessories

<b>Mfr. Part No</b>	<b>Code</b>	<b>Description</b>
3-8050	159 000 184	Universal mounting kit
3-8050.395	159 000 186	Transmitter NEMA 4X cover
3-8051	159 000 187	Flow Integral Mnt NPT
3-8050.396	159 000 617	RC Filter kit (for relay use)
3-8050.392	159 000 640	Model 200 retro-fit adapter
3-0000.596	159 000 641	Heavy duty wall mount bracket

## Engineering Specifications

- The transmitter shall meet appropriate CE, CSA & UL standards.
- The transmitter shall be manufactured under ISO 9001 certified processes.
- The transmitter shall be field or panel mountable.
- The transmitter shall have flow rate and dual totalization capability.
- The display units shall be fully scaleable.
- The device shall meet NEMA 4X and IP65 standards.
- The operating voltage shall be 12 to 24 VDC.
- The transmitter shall have a 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 dual 4 to 20 mA output with dual open collector with delta capability.
- The transmitter shall have simulate capability.
- The transmitter shall be +GF+SIGNET, Model 8550 Flow Transmitter.