

# SC-IF SERIES

## Features

- 4-20 mA Input (10-50 mA optional)
- 0 to 10 kHz Pulse Output
- Two Year Warranty
- Loop Powered
- Input & Output LED Indicators
- Various Mounting Styles

## Description:

The SC-IF loop powered signal conditioner whose function is to provide a 0 - 10kHz frequency output signal in response to a 4-20mA analog input.

The SC-IF appears to the input loop as a series shunt resistor. A small sense resistor is used to measure the input current. The input loop derives its power from the input current loop.

This input current signal is then scaled and converted to a 0 to 10,000 Hz frequency signal by a Current to Frequency Converter. This frequency signal is then transmitted across an optoisolator to the output stage.

The 10-50 mA range option is provided to enable the unit to perform range conversions as well as signal isolation.

## Specifications:

### Analog Input

- Available Ranges: 4-20 mA (10-50 mA optional)
- Input Type: Two Wire, Loop Powered
- Equivalent Input Impedance: 525  $\Omega$  on 4-20 mA range  
210  $\Omega$  on 10-50 mA range
- Operational Range: 3.5-33 mA
- Over Current Protection: 2.5 times rated span
- Reverse Polarity Protection
- Isolation Voltage: 500 V
- Input Loop Indicator: LED illuminates when loop is powered by proper polarity

## Current to Frequency Loop Powered Isolator



## Pulse Output Option

- Output Type: Open Collector Transistor
- Low Cutoff: 1% of full scale
- Range: 0 to 10,000 Hz
- Duty Cycle: 50/50 Duty Cycle (nominal)
- Maximum Off Voltage: 30 VDC
- Minimum On Current: 10 mA
- Maximum On Voltage: 1 VDC
- Temperature Effect: Less than 200 ppm/degree C
- Reverse Polarity Protection

## Mounting Styles

- DIN Rail Mount: Plastic enclosure with a snap fastener for fitting to DIN 46 277 and DIN EN 50 022 assembly rails.
- NEMA 4: 4.92" x 4.92" NEMA 4 Enclosure for wall mounting.
- Explosion Proof: Aluminum enclosure for: Class I, Division 1, Groups B, C & D; Class II, Division I, Groups E, F & G.

**Listing:** CE Compliant

