

## 4 - 20 mA LOOP POWERED AC SIGNAL TRANSDUCER

### FEATURES:

- ◆ Highly accurate, true RMS measurement, Compatible with SCRs and VFDs
- ◆ Self powered by the 4 - 20 mA loop.
- ◆ Robust construction, compact size and easy wiring.
- ◆ Compatible with 0.333V, 1.0V and milliamp output CTs.
- ◆ Ideal for control and energy monitoring.



### APPLICATION:

The *i-Snail<sup>®</sup>-X* transducer offers inexpensive yet accurate true RMS monitoring of AC signals in one circuit.

This product is ideal as a precision AC load transducer for Control and Energy Management applications.

Compatible with a variety of off the shelf CTs (including solid and split core), the loop powered *i-Snail<sup>®</sup>-X* provides a convenient tool for accurate load monitoring in any electrical equipment.

### PRODUCT DESCRIPTION:

The *i-Snail<sup>®</sup>-X* is a precision transducer that performs true RMS measurements in one AC circuit, via an external CT (or PT) that delivers a milliamp or millivolt signal.

The *i-Snail<sup>®</sup>-X* may be calibrated for various input signal levels. By using CTs of varying input capacities with identical output signal ratings (such as 0.333V devices), one *i-Snail<sup>®</sup>-X* may be used to measure any current range. The *i-Snail<sup>®</sup>-X* offers 0.3% accuracy (full scale), and may be used even on heavily distorted waveforms.

The transducer is powered by the 4 -20 mA current loop (it acts as a 'two wire loop device'). It will accept a wide range of loop excitation voltages, typically 24 VDC. The unit is hermetically potted in a small plastic enclosure equipped with two mounting holes. A barrier strip terminal is provided for the output wiring, and spade connectors are provided for the external CT or PT. Because of its small size, robust construction and ability to be remotely mounted, the *i-Snail<sup>®</sup>-X* offers high installation versatility.

The *i-Snail<sup>®</sup>-X* is compatible with Elkor's line of inexpensive split and solid core CTs, such as the MCT and MSCT series and all 1.0VAC and 0.333VAC current transformers. It may also be used with voltage transformers such as Elkor's VT series to provide AC voltage monitoring up to 600V (*i-Snail<sup>®</sup>-VT*).

### SPECIFICATIONS:

<i>Power:</i>	Standard 4-20 mA loop; voltage 8 - 35 VDC
<i>Current Input:</i>	Current input via an external CT or PT (sold separately). The unit may be configured for use with any of Elkor's MCT or MSCT units, or other units that output a linear millivolt or milliamp signal.
<i>Output:</i>	4-20 mA loop (sinking); max. impedance 750 ohm @ 24VDC (barrier strip terminal provided).
<i>Accuracy:</i>	TRMS, 0.3% FS, relative to accuracy of external CT. Up to crest factor of four.
<i>Enclosure:</i>	Potted plastic box L=3", W=1.1", H=0.4"

### ORDERING INFORMATION:



Input Type	Description	Maximum FS
MCTA	Solid Core CT	300A
MSCT1	Split Core CT	200A
MSCT2	Split Core CT	600A
MSCT3	Split Core CT	1500A
VT	Voltage Transformer	600V
mV	Millivolt input signal	Specify
mA	Milliamp input signal	Specify