

# 4MS2



**SENTRAN**  
Corporation

## Split Core AC Current Transducer 0-20mA or 4-20mA DC Loop Output Rugged Construction, 600VAC Rated

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Salem, Oregon USA 97302  
Tel (503)370-7377 Fax (503)566-7604

- Select Range from 15A to 1500 Amp Input
- Current Output Proportional to AC Input
- Accuracy +/- 0.5 at Full Scale
- 0.5" to 3.5" Windows (Select)
- Only Two Wires Required (The Loop)
- ETL Recognized (same as UL recognition)



The 4MS2 is an AC input current transducer with an internal 0-20mA or 4-20mA DC current loop transmitter that requires only two wires (the loop). The CT uses proportional conversion to obtain a DC signal from a pure sinewave input and is not designed for non-sinewave current. (If true RMS conversion is required from all waveforms, please refer to our RMS converter CT product line). The output current is a standard process control 0-20mA or 4-20mA (select one when ordering). The current output requires an external resistor in the range of 200 to 1000 ohms (200 ohms being nominal) as the load resistor for the loop – this resistor and the current loop voltage source for the two wire loop is normally provided at the loop receiver or instrument.

### Specifications

**Input Current:** AC current, sinewave, single phase 50/60/400Hz

**Voltage Rating:** 600Vac tested with 2.5KVDC for 60 seconds

**Output:** Select either 0-20mA or 4-20mA DC loop current

**Ratio and Linearity Accuracy:** Set to 0.5% full scale, 1.5% down to 10% of range, +/-3% @ 5% of Full Scale

**Response Time:** Approximately 250 milliseconds from 10% to 90% of amplitude for CT's over 100A (filtered DC)

**Ripple:** 0.5% is standard, lower at the sacrifice of response time (filtering increases response time)

**Bandwidth:** 10Hz to 1,000Hz within 3db

**Resistor at Receiver:** 250 Ohms Nominal: 10-750 Ohm depends on voltage source

**Loop Voltage Source:** 8 to 24 VDC normally provided by loop receiver -- adjust resistor size accordingly

**Temperature Effects:** Less than 0.05% from -20°C to +50°C

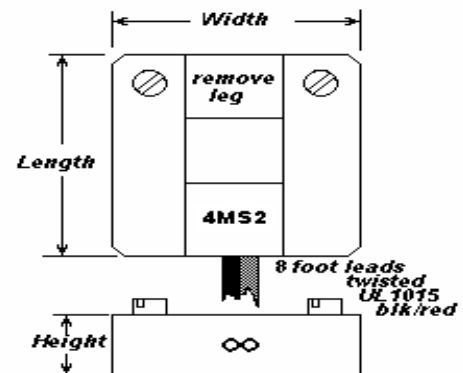
**Lead Wires:** 8 Foot twisted, Black/Red Per UL1015 – connect to loop using insulated wire nuts

**Construction:** PVC and/or potted housing for indoor type 1 rating per UL506. Tilt Leg plus 1 Nylon Screw

**How To Order:** Create a part number using "4MS2" then input, output & window.

Example: 4MS2-300A:0-20mA-2.5" is a 300A CT with 0-20mA loop current and 2.5" window.

Window	Length(*)	Width	Height
.50", 0.75"	2.4"	2.6"	1"
1.0"	2.8"	3.3"	1"
1.25"	3.2"	3.5"	1"
.5"	3.5"	3.7"	1"
2.0	3.8"	3.8"	1"
2.5"	4.7"	5.3"	1"
3.0"	5"	5.5"	1"
3.5"	5.5"	5.5"	1"



Call 1-888-390-2621

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