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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# 4-Wire Current Transmitter 4-20 mA Output

The **CR4340** series, 4-Wire Current Transmitter produces a calibrated 4-20 mA DC signal proportional to the average RMS value of the input alternating current. The output signal is produced by an internal current generator powered from an external 120 Vac supply. The output signal is unaffected by variations in interconnect and load impedance (within specification limits) thus providing a highly accurate means for monitoring alternating current over long distances.

The 4-wire transmitter allows for direct attachment to instrumentation. There is no need for external DC power as required with 2-wire transmitters.

## Features

- Permanently calibrated
- Fully isolated
- Output overload protected
- 13 different ranges - 6 field selectable
- Internal current generator
- 2 case styles, .94" (23.9) and 2.13" (54.1) window opening
- Monitors over long distances

## Specifications

### Accuracy:

±0.5% Full-Scale (FS)

### Ripple & Noise:

1% Max., peak to peak

### Calibrated Signal Out:

4-20 mA DC

### Response Time:

150 ms max., 10-90% FS

### Max. Signal Out:

30 mA DC

### Temperature Coefficient:

± 0.02%/°C

### Supply Voltage:

120 ±10% Vac

### Frequency:

50/60 Hz

### Continuous Thermal Current Rating Factor:

1.50 @ 30°C for ranges-All Ranges up to 75 Amp.

1.33 @ 30°C for ranges 100 Amp. and over

### Short Time Thermal Current

### Rating Factor (For 30 Seconds):

15.0 x Full Scale for AC ranges up to 75 Amp.

4.0 x Full Scale for ranges 400 Amp. and over

### Output Load:

0-1000 ohms

### Insulation Class:

600 V, BIL 10 kV Full Wave

### Operating Temperature Range:

-30°C to +60°C

### Storage Temperature Range:

-55°C to +85°C



Case Style 2

Case Style 1

## Part Numbers

### CR4340 - 4-WIRE CURRENT TRANSMITTER

	Full-Scale (FS) Range in AC Amps	Case Style
5	0-5	1
	0-10*	1
	0-15*	
	0-20*	
20	0-25*	1
	0-50*	
	0-75*	
75		
100	0-100	2
150	0-150	2
200	0-200	2
300	0-300	2
400	0-400	2
600	0-600	2

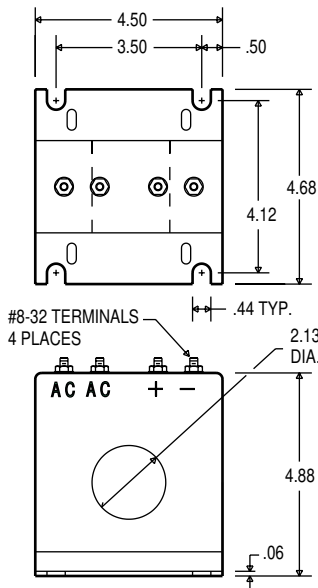
\* RANGE SET WITH FIELD SELECTABLE SWITCH

Internet Resources <http://www.crmagnetics.com/>

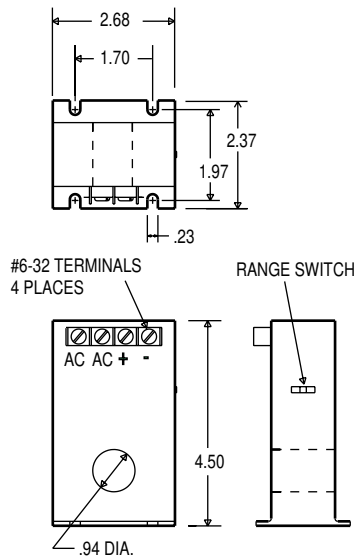
- Transducer Selection Guide: [transducer.html](#)
- Application Sheet: [pdf/ancr4340-1.pdf](#)
- Pricing: [pricing/4340.html](#)

# 4-Wire Current Transmitter 4-20 mA Output

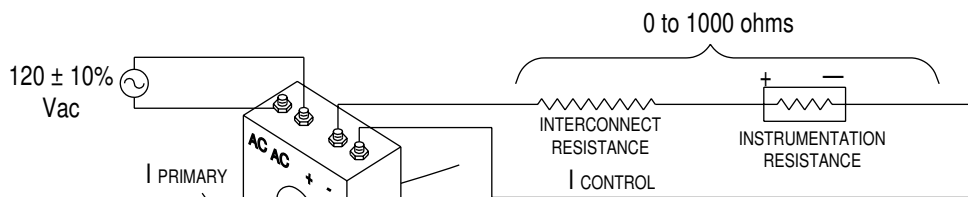
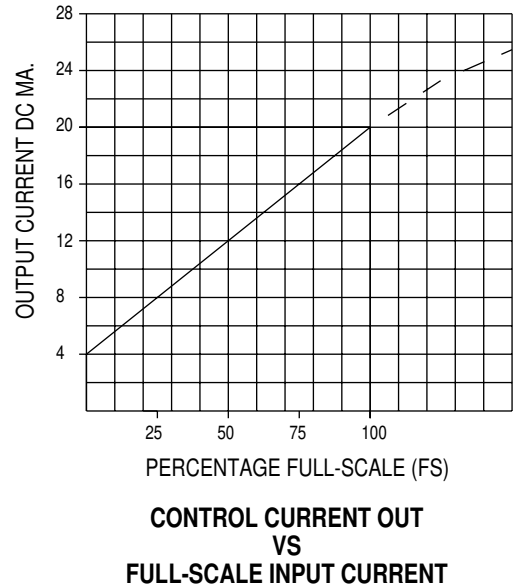
## Application Notes



Case Style 2



Case Style 1

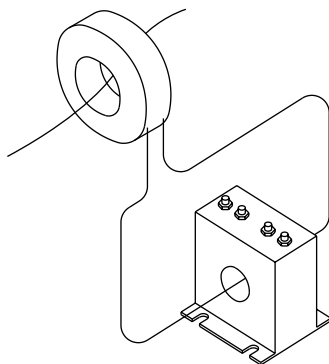


$$I_{\text{CONTROL}} = \left[ \frac{I_{\text{PRIMARY}}}{\text{FS}} \times 16 \right] + 4$$

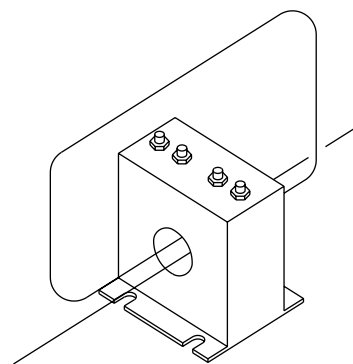
FS = FULL-SCALE CURRENT IN AMPS RMS  
 I PRIMARY = MONITORED CURRENT IN AMPS RMS  
 I CONTROL = LOOP CURRENT IN mA dc

in (mm)

## Typical Applications



An external current transformer may be used with the transmitter by routing the secondary leads through the window opening. Use the CR4340-5 current transmitter when using 5-Amp secondary instrument grade current transformer. For additional details on current transformers, see page 22.



The scaling factor may be changed by threading the primary current-carrying wire several times through the window opening. The "actual" measurement range will be the name plate range divided by the number of wire passes. For example, the CR4340-30 has the name plate range of 0-30 ACA. Two passes of the wire through the window opening will then provide an effective range of 0-15 ACA (30÷2).