

AC Current Transmitter

True RMS Model RM3-AI-LPI



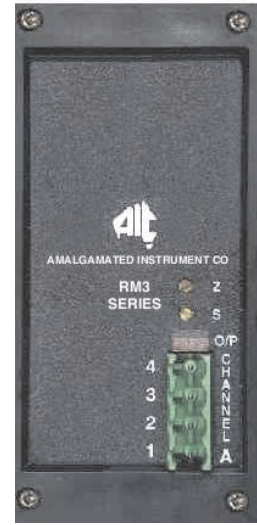
RM3-AI-LPI-4
Four Channel



RM3-AI-LPI-3
Three Channel



RM3-AI-LPI-2
Two Channel



RM3-AI-LPI-1
One Channel

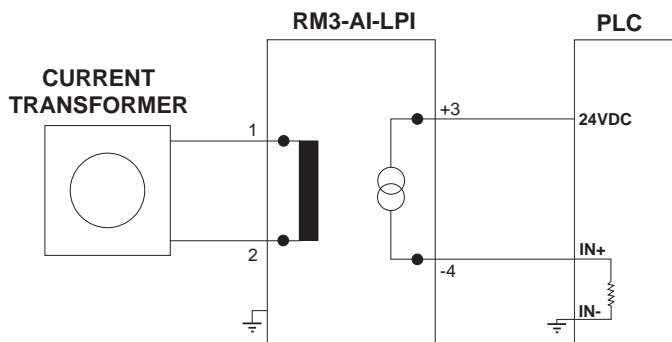
Description

The RM3 loop powered AC current transmitter has input range of up to 0-5A RMS and provides an isolated true RMS 4-20mA retransmission of the input current. The measurement range can be extended by use of a suitable external current transformer.

One, two, three or four channel models are available, each providing 2kV electrical isolation between input and output. A LED gives output level indication by varying its brightness with the output current.

An optional 240VAC or 110VAC supply is available for one or two channel models. This option provides two isolated 24VDC supplies to provide power for the loop.

Typical Application



Features

- 2 Wire - Loop powered
- True RMS retransmission
- Input range of up to 5 Amps AC
- External current transformer input can be used to extend measured range
- 2kV isolation between channels and input/output
- Output level indicator LED
- Front panel span and zero adjustment
- Wide span and zero range
- One, two, three or four channel models in one compact case
- Rugged enclosure
- DIN rail mount
- Plug in screw terminal connectors
- Same connector can be used on each channel - useful for testing
- Optional 240V or 110VAC supply versions for one or two channel models
- AC Voltage input models also available - model RM3-AV-LPI
- 2 Year guarantee

RM3AI-2.0-0

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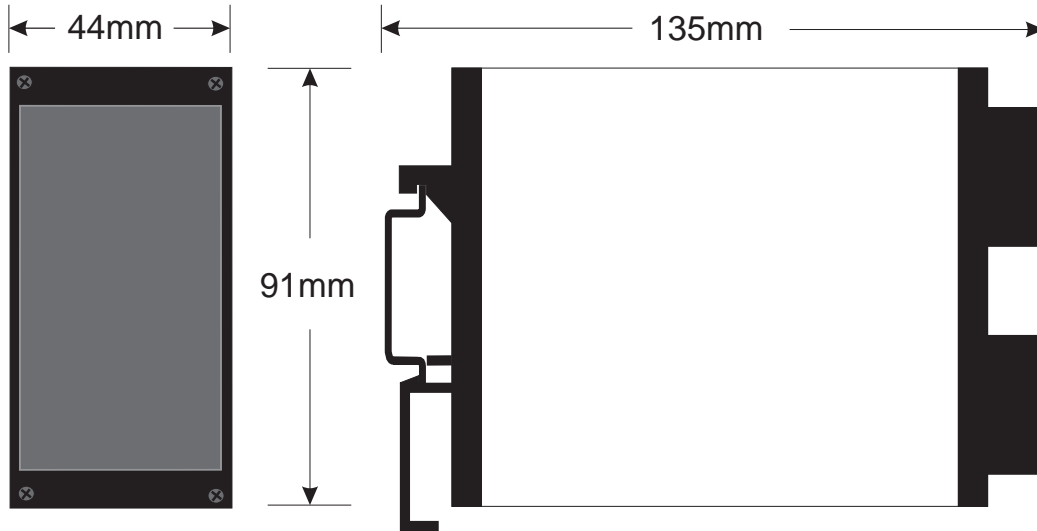
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Specifications and Ordering Information

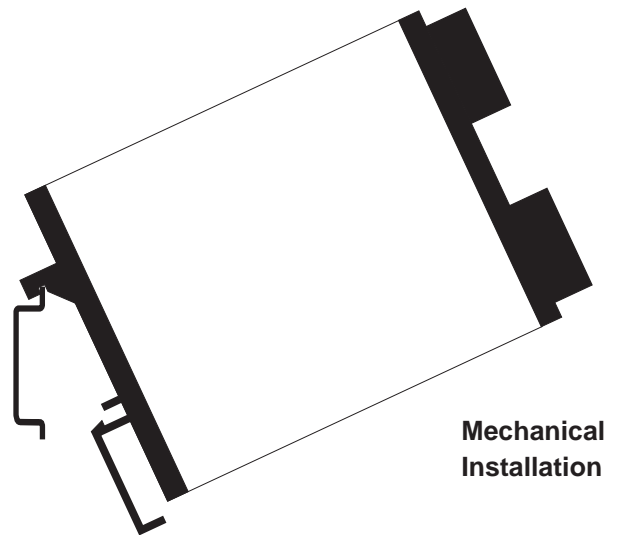
Specifications are subject to change without notice

Dimensions



TECHNICAL SPECIFICATIONS

Input:	0-5 Amps AC
Output:	4-20mA
Supply:	Loop powered. Loop supply voltage required 15 to 34VDC nominal
Accuracy:	0.5% of full scale (pure sinewave input)
Linearity:	Better than 0.5%
Response Time:	<0.5 sec to 1% Response time is specified over the stated RMS input level with the input signal increasing from zero. Response time will be greater for decreasing amplitude signals
Protection:	Reverse polarity output protection
Isolation:	2kV between channels and input/output
Loop Supply:	13 to 35VDC
Maximum Load:	$R_L = \frac{\text{Supply (V)} - 9}{0.02}$ Ohms
Load Effects:	Effect on accuracy of changing load resistance is no greater than 0.1% of full scale
Ambient temp:	0 to 60°C
Humidity:	5 to 95% non condensing



PHYSICAL CHARACTERISTICS

Case size:	44mm x 91mm x 120mm
Mounting:	35mm DIN Rail mount (EN50022)
Connections:	Plug in screw terminals (max 2.5mm ² wire)
Weight:	250 gms for one channel 300 gms for two channels 350 gms for three channels 400 gms for four channels

OPTIONS

Power supply:	240VAC or 110VAC supply - provides two isolated 24V supplies @ 40mA each (one or two channel models only)
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ORDER CODE

RM3-AI-LPI-1	One channel model
RM3-AI-LPI-2	Two channel model
RM3-AI-LPI-3	Three channel model
RM3-AI-LPI-4	Four channel model
RM3-OPT-240-01	Optional 240VAC supply
RM3-OPT-110-01	Optional 110VAC supply