

# AC Voltage Transmitter Model RM3-AV-LPI



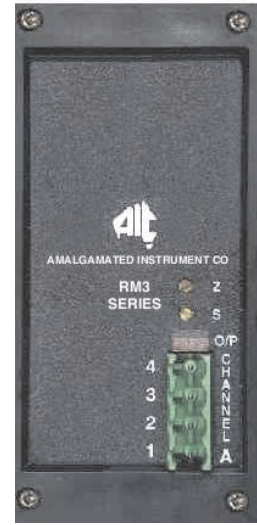
**RM3-AV-LPI-4**  
Four Channel



**RM3-AV-LPI-3**  
Three Channel



**RM3-AV-LPI-2**  
Two Channel



**RM3-AV-LPI-1**  
One Channel

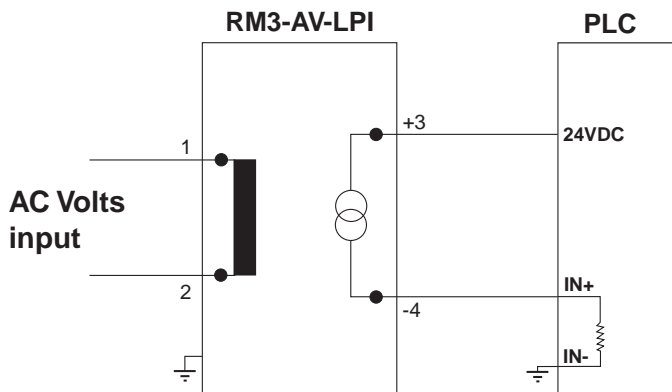
## Description

The RM3 loop powered AC voltage transmitter has input ranges of 1.5 V, 15V, 150V & 250V and provides an isolated true RMS 4-20mA retransmission of the input voltage. The measurement range can be extended by use of a suitable external voltage transformer.

One, two, three or four channel models are available, each providing 2kV (1 minute max.) 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
- 1.5, 15, 150 & 250VAC input ranges
- External voltage 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 current input model also available - model RM3-AI-LPI
- 2 Year guarantee

RM3AV-2.0-0

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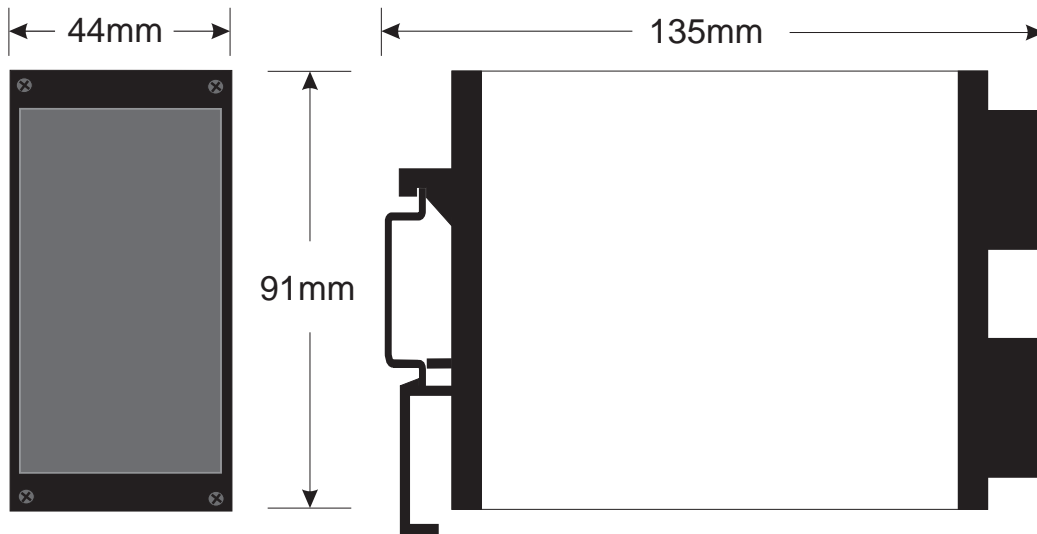
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# Specifications and Ordering Information

Specifications are subject to change without notice

## Dimensions



## TECHNICAL SPECIFICATIONS

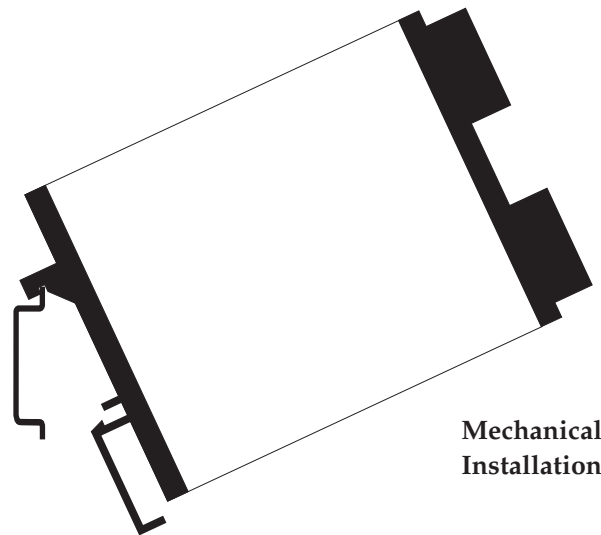
Input:	AC Volts in user selectable ranges of 1.5, 15, 150 or 250VAC
Output:	4-20mA
Supply:	Loop powered. Loop supply voltage required 9 to 34VDC nominal
Accuracy:	0.5% of full scale (pure sinewave input)
Linearity:	Better than 0.5%
Response Time:	<0.5 sec to 1% Response time is specified over the stated 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 for 1 minute max. between channels and input/output
Loop Supply:	9 to 34VDC
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 <sup>2</sup> 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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Mechanical Installation



## ORDER CODE

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