

Model RM3-IV-LPI Loop Powered Transmitter/Isolator

Accepts 0-20mA, 4-20mA, 0-200mV, 0-2V, 0-20V or 0-100VDC



RM3-IV-LPI-1
One Channel



RM3-IV-LPI-2
Two Channel



RM3-IV-LPI-3
Three Channel



RM3-IV-LPI-4
Four Channel

Description

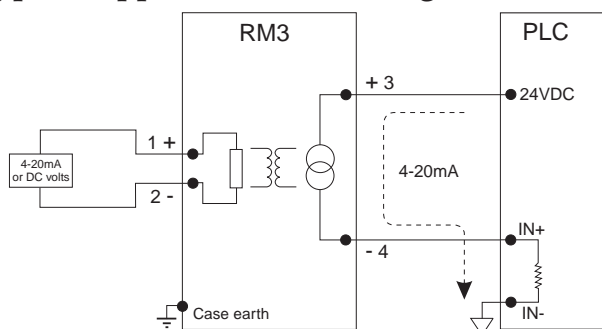
Model RM3-IV is a loop powered transmitter with DC input ranges of 0-20mA, 4-20mA, 0-200mV, 0-2V, 0-20V or 0-100V. The 0-200mV input range ideal for use with DC shunts.

A fully isolated 4-20mA retransmission is provided for each input with zero and span adjustment being provided for all channels.

One, two, three or four channel models are available in the same compact (only 44mm wide) case. A LED for each channel 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.

Typical Application Block Diagram



Features

- 2 Wire - Loop powered
- Input ranges 0-20mA, 4-20mA, 0-200mV, 0-2V, 0-20V or 0-100V DC (link selectable)
- 1kV isolation
- Reverse input/output protection
- High accuracy
- Output level indicator LED
- Front panel span and zero adjustment for each channel
- Wide zero and span range
- Up to four independent input/output channel models in a single compact case
- Plug in screw terminal connectors
- Rugged enclosure
- 2 year guarantee
- Optional 240V or 110VAC supply versions for one and two channel models
- DIN rail mount



RM3IV-2.0-0

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Specifications and Ordering Information

Specifications are subject to change without notice

TECHNICAL SPECIFICATIONS

Input:	0-20mA, 4-20mA, 0-200mV, 0-2V, 0-20V or 0-100V DC (link selectable)
Output:	4-20mA
Isolation:	Better than 1kV DC or RMS, input to output & channel to channel
Supply:	Powered by the 4-20mA loop. Loop supply required 12 to 34VDC.
Accuracy:	Better than 0.05% of full scale (0-20mA, 4-20mA, 0-1, 0-10, 0-100 Volts) or 0.1% of full scale (100mV) when calibrated
Linearity:	Better than 0.05 % of full scale (0-20mA, 4-20mA, 0-2, 0-20, 0-100 Volts) or 0.1% of full scale (200mV) when calibrated
Input Resistance:	10Ω nominal (0-20mA & 4-20mA) 1MΩ (mV and Volts ranges)
Response Time:	<0.5 sec to 1%
Protection:	Reverse polarity input/output protection
Maximum Load:	$R_L = \frac{\text{Supply (V)} - 10}{0.02}$ Ohms
Load Effects:	Effect on accuracy of changing load resistance is no greater than 0.05% of full scale
Ambient temp:	0 to 60°C
Humidity:	5 to 95% non condensing

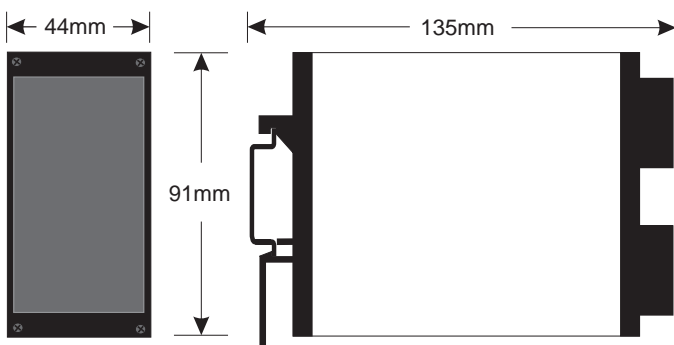
PHYSICAL CHARACTERISTICS

Case size:	44mm x 91mm x 135mm
Mounting:	35mm DIN Rail mount (EN50022)
Connections:	Plug in screw terminals (max 1.5mm ² wire)
Weight:	1 channel 320 gms, 2 channel 370 gms, 3 channel 440 gms, 4 channel 490 gms

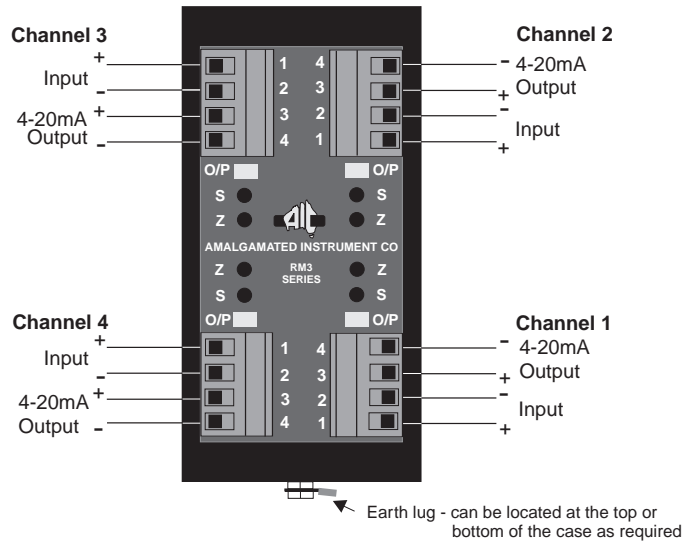
OPTIONS

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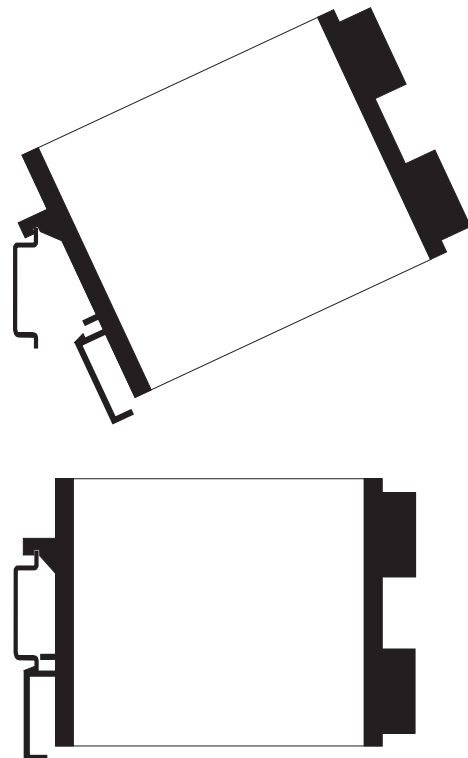
DIMENSIONS



ELECTRICAL CONNECTIONS - 4 CHANNEL



MECHANICAL



ORDER CODE

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