

ADM241X Thermistor Transmitter/Splitter

- AC Supply voltage options: 115Vac / 230Vac +/-20%
- 24Vdc supply option available
- Amelec standard 10 year warranty
- Suitable for SIL 1, 2, & 3 (IEC 61508-2) safety system loop applications

APPLICATION

- Resistance/Thermistor signal Repeat / Splitter
- Signal Isolator / Noise filter
- Signal converter to resolve incompatibility.

TECHNICAL SPECIFICATION

INPUT

Two wire Thermistor/ Resistance input.

Note: Excitation for the sensor will be from the device connected to output 1.

OUTPUT 1

Non-Isolated straight through connection of input signal.

OUTPUT 2

DC current or voltage specified in the range of:
 Current up to 100mA max in Sink configuration (externally powered)
 Current up 22mA max Source configuration (Internally powered)
 Voltage any from 1 to 10Vdc max @ up to 5mA per output.
 Typical output range: 0 – 10Vdc or 4-20mA

CONTROLS

Zero / Span (+/- 20%): 15 turn potentiometers for output calibration.

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

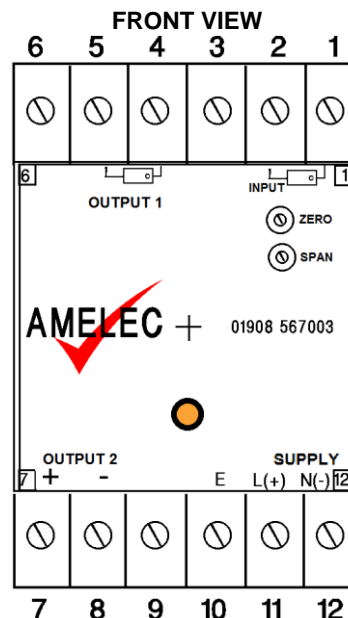
Linearity: < ±0.2%
 Response time: Typically < 400mS
 Accuracy: < ±0.2% (0.1% with 'G' option specified)

PROTECTION

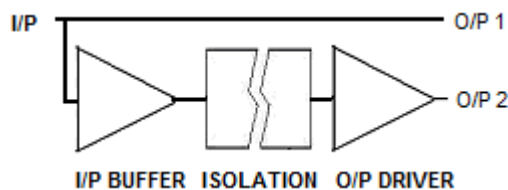
Input O/C drive Upscale
 Isolation 1000V RMS.
 Input+Output1/Output 2/Supply/Earth
 Internal Fuse.
 Input over range up to typically 300%.

TERMINATION

INPUT 1 +	1
INPUT 1 -	2
	3
OUTPUT 1 +	4
OUTPUT 1 -	5
	6
OUTPUT 2 +	7
OUTPUT 2 -	8
	9
Earth	10
Live / +	11
Neutral / -	12



FUNCTION BLOCK DIAGRAM



ENVIRONMENTAL CONDITION

Storage temperature: - 40 to +70 °C
 Operating Ambient: -15 to +55 °C
 Relative Humidity: 5 to 95% RH

MOUNTING / DIMENSION

Enclosure: 50w x 75h x 110d mm
 Mounting: Din rail (TS35) or Surface by corner fixing holes
 Weight < 200g

ADD ON / OPTIONS

DI: LCD display for local monitoring
 P: Output Test point
 K: Higher level of EMC/EMI-RFI protection
 G: Linearisation to temperature
 Non standard Power supply ranges available