

ADM221X-2 RTD Transmitter/Splitter

- Suitable for SIL 1 & SIL 2 rated safety system (EN 61508) loop applications, as 1oo1 architecture (HFT:0)
- Universal AC Supply voltage: 95 to 250Vac as standard
- 24Vdc supply option available on request
- RFI Protection to EN 61000-4-3:2006/A2:2010 available ('K' Option)
- Amelec standard 10 year warranty

APPLICATION

- RTD Repeat / Splitter
- Signal Isolator / Noise filter
- Signal converter to resolve incompatibility.

TECHNICAL SPECIFICATION

INPUT

Two or Three wire PT100 RTD. Minimum input span 50 °C.

(PT130 / PT1000 RTD options available on request)

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

OUTPUT 1 (Non-isolated)

Non-Isolated repeat connection of input RTD signal.

OUTPUT 2 (Isolated)

Isolated repeat connection of input RTD signal.

Note: mA Excitation for this RTD port will be from the new device connected to output 2.

(Simple Survey procedure to determine the bulb Excitation Currents from external devices is available from Amelec, if not already known)

CONTROLS

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

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

Linearity: < ±0.2%
Response time: ≤400mS (0-100% span input step change)
Accuracy: < ±0.2%

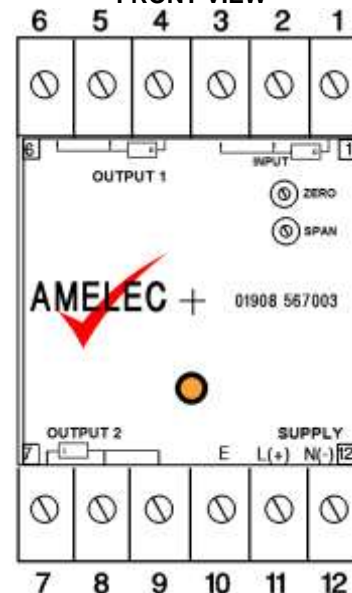
PROTECTION

Input open circuit response: Upscale drive as std
Isolation: 1000V rms (Input+Output1)/Output 2/Supply/Earth
Internal Fuse.
Input over range: typically up to 300%.

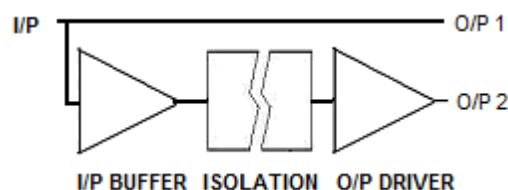
TERMINATION

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

FRONT VIEW



FUNCTION BLOCK DIAGRAM



ENVIRONMENTAL CONDITIONS

Storage temperature: - 40 to +70 °C
Operating Ambient: -15 to +55 °C
Relative Humidity: 5 to 95% RH (Non-Condensing)
EMC: 2014/30/EU, EN 61326-1:2013 (Controlled EM)

MOUNTING / DIMENSIONS

Enclosure: 50w x 75h x 110d (mm)
Mounting: Din rail / Surface (optional Panel Mount)
Weight < 200g

ADD ON / OPTIONS

DI: LCD display for local monitoring of temperature
K: Higher level of RFI protection (20-1000MHz, ≤30V/m)
PT1000: PT1000 RTD input available on request
PT130: PT130 RTD input available on request