

ADM211X Thermocouple Repeater / Splitter with Isolated Outputs

- Suitable for use in SIL 1 & SIL 2 rated (IEC61508) safety system loop applications (1oo1 architecture, HFT: 0)
- Supply voltage : Universal 95Vac-250Vac as standard
Other options: 24Vdc $\pm 10\%$ or 48Vdc $\pm 10\%$,
115Vac $\pm 20\%$ or 230Vac $\pm 20\%$

- Amelec standard 10 year warranty

APPLICATION

- mV Repeat / Signal Splitter for new additional equipment
- Signal Isolator / Booster / Noise filter
- Signal converter to resolve incompatibility.

TECHNICAL SPECIFICATION

INPUT

mV signal from any Thermocouple type; J, K, N, R, S or T, with a minimum 4mV span.

Typical Input: 0-1000°C Type K, 0-250°C Type J,
0-600°C Type N, 0-800°C Type R

Automatic cold junction compensation fitted as standard

OUTPUTS

2 x Isolated straight through repeat of input signal with automatic cold junction compensation.
(T/C extension wire to be used between outputs & the temperature monitoring system/control devices input ports)

CALIBRATION CONTROLS

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

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

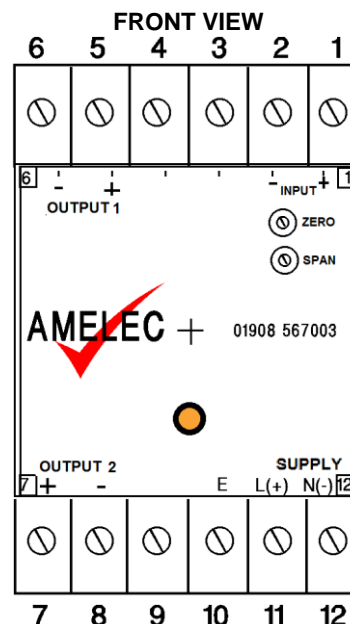
Linearity: $< \pm 0.2\%$
Response time: Typically $< 400\text{ms}$
Accuracy: $< \pm 0.1\%$ mV span
Supply Regulation: DC $\pm 10\%$, AC $\pm 20\%$,
Supply Consumption: 3VA
Input O/C response: Upscale drive as standard
(Downscale drive available upon request)

PROTECTION

Isolation: 1000V RMS* Input/Output1/Output 2/Supply/Earth
*(500Vdc when 'K' option RFI protection is specified)
Internal Fuse.
Input over range up to typically 300%.

TERMINATION

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



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 ('K' option = 182d mm)

Mounting: Din rail (TS35) or Surface by corner fixing holes

Weight $< 300\text{g}$

ADD ON / OPTIONS

DI: LCD display for local monitoring

J : Input injection jack socket

P: Test point

K: High level of RFI protection: IEC61000-4-3:2006/A2:2010
(20MHz-3GHz/5.25GHz $\leq 10\text{V/m}$, 80MHz-1GHz/5.6GHz $\leq 30\text{V/m}$)

Non standard Power supply & Output ranges available