

ADM211K Thermocouple Transmitter with Dual Isolated Outputs

- Suitable for SIL 1 & SIL 2 rated (EN 61508) safety instrumented system (SIS) loop applications, as 1oo1 architecture (HFT:0)
- Supply voltage options: 115Vac $\pm 20\%$
230Vac $\pm 20\%$
24Vdc $\pm 10\%$
48Vdc $\pm 10\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010
- Non-Smart / Non-uProcessor, Type A instrument
- AMELEC Standard 10 year warranty

TECHNICAL SPECIFICATION

INPUT

mV signal developed from any thermocouple type; J, K, N, R, S or T, with a minimum 4mV span.
Automatic cold junction compensation fitted as standard.

ISOLATED OUTPUTS (x2)

Current: up to 22mA max in std Source configuration
(100mA max in optional Sink port configuration)
Voltage: any from 0.4V to 10Vdc max span as standard.
Typically: 4-20mA (max load 550 Ω) or 0-10Vdc (min load 500 Ω)

Optional Isolated repeat(s) of the input mV signal with automatic cold junction compensation is available for additional monitoring.
(T/C extension wire to be used between output(s) & the new additional monitoring system/ control device input port)

CONTROLS

15 turn potentiometers for each output channel.
Zero $\pm 25\%$, Span $\pm 50\%$

INDICATOR

Power ON: LED, Amber.

PERFORMANCE

Response time: Typically < 200ms
Accuracy: < $\pm 0.1\%$ mV span
Linearity: < $\pm 0.1\%$ mV span
Supply consumption: < 3VA

PROTECTION

Isolation: 500Vdc Input/Output1/Output2/Supply/Earth
Internal Fuse.
Input over range: up to typically 300%.
RF immunity: < 1% error over 20MHz-3GHz/5.25GHz ≤ 10 V/m
(80MHz-1GHz/5.6GHz ≤ 30 V/m, 889MHz/1.75GHz ≤ 40 V/m)

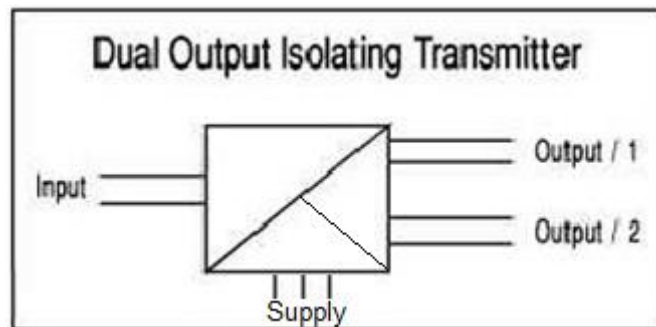
TERMINATION

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

FRONT VIEW



FUNCTION BLOCK DIAGRAM



ENVIRONMENTAL CONDITION

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

MOUNTING / DIMENSION

Enclosure: 50w x 75h x 182d mm
Mounting: Heavy duty Din Rail (TS35) as standard.
(Surface by Seismic key hole plate option available, mounting plate dimensions 50w x 130h mm)