

ADM210X-2 Dual Channel Thermocouple Transmitter/Isolator

- Suitable for SIL 1, 2 & 3 rated (EN 61508-2) safety instrumented system (SIS) loop applications
- Non-Smart / Non-uProcessor based, Type A instrument
- Supply voltage options: 24Vdc or 48Vdc +/-10% as std (AC power supply options available on request)
- AMELEC Standard 10 year warranty
- RFI Protection to EN 61000-4-3:2006/A2:2010 available

Technical Specifications (per channel)

Input (per channel)

mV signal developed from any Thermocouple type; B, J, K, N, R, S, T, with a minimum 4mV span
(Automatic cold junction compensation as standard)

Output (per channel)

Any standard process current or voltage in the range of;
Current source up to 22mA max, with drive voltage 24Vdc
(Current Sink option available, 30Vdc max external drive)
Voltage source up to 20Vdc max output
Typical Output: 4-20mA (max load 500Ω) or 0-10Vdc (min load 500Ω)

Performance (per channel)

Accuracy/Linearity: $<\pm 0.1\%$ mV Span
Response Time: typically $<400\text{ms}$ (10-90% input step change)

Environmental Conditions

Storage Temperature -40 to $+70^\circ\text{C}$
Operating Ambient: -15 to $+55^\circ\text{C}$
Relative Humidity: 5 – 95% RH (Non-condensing)
EMC: 2014/30/EU, EN 61326-1:2013 (controlled EM)
(‘K’ option: EMC/EMI/RFI protection to the highest Generic Industrial Standards Test levels available)

Protection

Isolation: 1000V RMS* Input/Input/Output/Output/Supply/Earth.
*(500Vdc when ‘K’ option RFI protection is specified)
Internal Fuse
Input over range: typically up to 300% as std
Input Open Circuit response: Upscale drive as std
(Downscale drive may be specified if preferred)

Options

‘K’: RF Immunity 80MHz-1GHz/5.6GHz, $\leq 20\text{V/m}$

Din Rail (TS35) Enclosure Dimensions:

50w x 75h x 110d mm as std
(‘K’ option enclosure= 50w x 75h x 182d mm)

