

ADM214X mV Signal Transmitter / Repeater / Splitter

- Suitable for use in SIL 1 & SIL 2 rated (EN 61508) safety system loop applications, as 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

Any mV range (up to 400mV) may be specified, with a minimum 3mV span.
Typical Input: 0-5mV, 0-10mV, 0-20mV, 0-30mV, 0-50mV, 0-200mV or 0-100mV dc

OUTPUT 1

Non-Isolated straight through repeat of the input signal to the original monitoring system/control device input port.

OUTPUT 2

Current: up to 22mA max in std Source configuration (100mA max in optional Sink port configuration)
Voltage: any from 0.4 to 10Vdc max as std. Isolated mV repeat of input signal for additional monitoring available.
Typically: 4-20mA (max load 550 Ω) or 0-10Vdc (min load 500 Ω)

(ADM214X-mV model available for Isolated repeat of the mV input signal)

CALIBRATION CONTROLS

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

INDICATOR

Power **ON**: LED, Amber.

PERFORMANCE

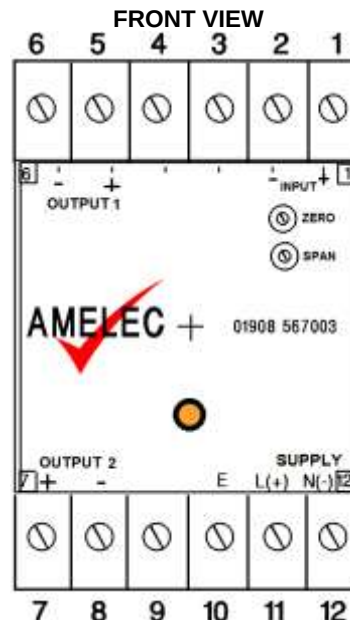
Accuracy/Linearity: $< \pm 0.1\%$ mV span
Response time: Typically $< 400\text{ms}$

PROTECTION

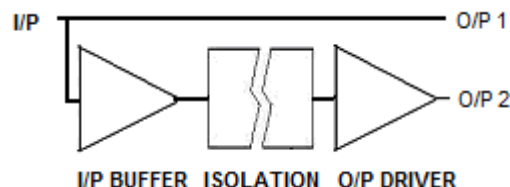
Isolation: 1000V RMS* (Input+Output1)/Output 2/Supply/Earth
*(500Vdc when 'k' option is specified)
Internal Fuse.
Input over range: up to 300%.

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



FUNCTION BLOCK DIAGRAM



ENVIRONMENTAL CONDITION

Storage temperature: - 40 to +70 °C
Operating Ambient: -15 to +55 °C
Relative Humidity: 5 to 95% RH (Non-Condensing)
EMC: 2014/30/EU, EN61326-1: 2013 (Controlled EM)
(*K' option to the highest Generic Industrial levels)

MOUNTING / DIMENSION

Enclosure: 50w x 75h x 110d mm (*K' option = 182d mm)
Mounting: Din rail (TS35) or Surface by corner fixing holes
Weight < 300g

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