

## ADM231MX-3 Three way signal Converter/Isolator/Splitter

Supply voltage options: 12Vdc / 24Vdc / 48Vdc ( $\pm 10\%$ )

- Amelec standard 10 year warranty
- Non-Smart/Non-uProcessor based, Type A instrument
- Suitable for SIL 1 & SIL 2 rated (IEC 61508-2) safety system loop applications, as 1oo1 architecture (HFT:0)

### APPLICATION

- Signal Isolator / Splitter
- Signal Isolator / Booster
- Signal converter to resolve incompatibility.

### TECHNICAL SPECIFICATION

#### INPUT

Typically 4-20mA, Active port TB1+ve, TB2 -ve, with integral 24Vdc@22mA loop Excitation.

#### OUTPUTS

Different mA / Voltage ranges for each output channel may be specified; DC current ranges up to 22mA, voltage ranges up to 10Vdc

Typically: 3 x 4 - 20mA (Source ports, into 500 $\Omega$  max loads)

Current Sink ports up to 22mA may be specified (externally powered, up to 28Vdc max)

#### CONTROLS

Zero / Span ( $\pm 15\%$ ): 15 turn potentiometers for each output channel calibration.

#### INDICATOR

Power ON: LED, Amber.

#### PERFORMANCE

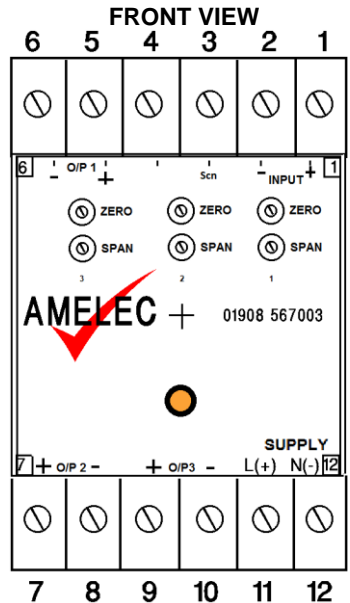
Linearity:  $< \pm 0.1\%$   
 Response time: Typically  $< 100\text{ms}$   
 Accuracy:  $< \pm 0.1\%$   
 Supply regulation:  $\pm 10\%$   
 Supply consumption:  $< 3\text{VA}$

#### PROTECTION

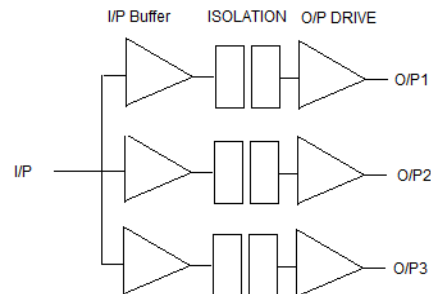
Isolation: 1000V RMS,  
 Input /Output1/Output 2/Output3/Supply  
 Internal Fuse.  
 Input over range up to typically 120%.  
 Output limited at 120%

### TERMINATION

Source	Input +	1
	Input -	2
	Scn	3
		4
OUTPUT 1 +		5
OUTPUT 1 -		6
OUTPUT 2 +		7
OUTPUT 2 -		8
OUTPUT 3 +		9
OUTPUT 3 -		10
Supply / +		11
Supply / -		12



### 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 or Surface by corner fixing holes  
 Weight  $< 200\text{g}$

### ADD ON / OPTIONS

DI: LCD display for local monitoring  
 J : Input injection jack socket  
 K: RF Immunity: 20MHz-3GHz/5.25GHz 10V/m,  
 80MHz-1GHz/5.6GHz 30V/m, 889MHz/1.75GHz 40V/m  
 Non standard Power supply ranges also available