

ADM220K RTD Temperature Transmitter / Isolator

- Suitable for SIL 1 & SIL 2 rated (EN 61508-2) safety instrumented system (SIS) loop applications, as 1oo1 architecture (HFT:0)
- Non-Smart / Non-uProcessor, Type A instrument
- Suitable for 2, 3 or 4 wire RTD Inputs
- Supply voltage options:
 - 115Vac $\pm 20\%$
 - 240Vac $\pm 20\%$
 - 24Vdc $\pm 10\%$
 - 48Vdc $\pm 10\%$
 - 110Vdc $\pm 15\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010
- AMELEC Standard 10 year warranty

TECHNICAL SPECIFICATION

INPUT

Any 2, 3 or 4 Wire RTD BS1904, PT100 with a span $\geq 25^{\circ}\text{C}$ may be specified
(PT130, PT500 or PT1000 inputs also available on request)

OUTPUT

DC current or voltage specified in the range of:
Current up to 100mA max in Sink configuration (external power)
Current up to 22mA max Source configuration (Internally powered)
Voltage up to 20V max @ up to 5mA per output.
Typical output range: 4 - 20mA (Source port, into 1200 Ω load max)

CONTROLS

15 turn potentiometers.
Zero $\pm 25\%$
Span $\pm 50\%$

INDICATOR

Power ON: LED, Amber.

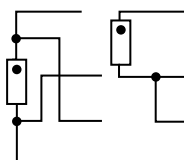
PERFORMANCE

Response time: Typically < 400mS (0-100% input step change)
Accuracy: < $\pm 0.1\%$ span
Linearity: < $\pm 0.1\%$ span
Supply consumption: < 3VA
Input Open Circuit response: Upscale drive as std
(O/C Downscale drive available – 'X' option)

PROTECTION

Isolation: 500Vdc Input/Output/Supply/Earth
Internal Fuse.
Input over range: typically 300%.
RF Immunity: 20MHz-3GHz/5.25GHz 10V/m, 80MHz-1GHz/5.6GHz 30V/m
(889MHz/1.75GHz 40V/m)

TERMINATION

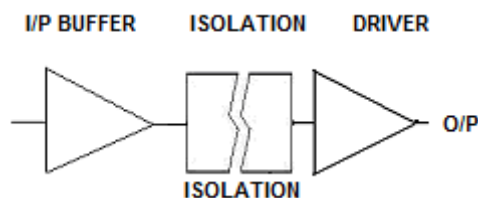


1
2
3
4
5
6
OUTPUT +
OUTPUT -
Scn
Earth
Live / +
Neutral / -
12

FRONT VIEW



FUNCTION BLOCK DIAGRAM



ENVIRONMENTAL CONDITIONS

Storage temperature: -40 to +70 $^{\circ}\text{C}$
Operating Ambient: -15 to +55 $^{\circ}\text{C}$
Relative Humidity: 5 to 95% RH (Non-Condensing)
EMC: 2014/30/EU, EN 61326-1:2013 (Generic Industrial Levels)
RoHS: 2011/65/EU

MOUNTING / DIMENSION

Enclosure: 50w x 75h x 182d mm
Mounting: DIN Rail (TS35) as standard
(Seismic / Surface keyhole plate or Front of Panel mounting options also available)
Weight < 550g

ADD ON / OPTIONS

G: Additional Linearisation to temperature if required
DI = Digital Display (3.5 digit LCD or 4 digit LED display of the input Temperature or Output signal in units to suit application)