

## AH-GEM 720 RTD Temperature Transmitter

- Suitable for Upgrade/Replacement of original GEM80 8420 series Temperature input signal conditioning cards
- Supply voltage 21 to 30Vdc (new 24Vdc supply required to the original 8405 series Subrack)
- Amelec standard 10 year guarantee
- Suitable for SIL Level 1, 2, & 3 (IEC 61508-2)

### TECHNICAL SPECIFICATION

#### FUNCTION

Temperature input signal Converter / Isolator

#### INPUT

Can be configured to accept 2 or 3-wire PT100 Resistance thermometer inputs  
(PT1000 RTD input also available on request).

Typical input: 0 – 100 Deg °C / 3-wire

#### OUTPUT

DC current or voltage specified in the range of:  
Current up to 100mA max in Sink configuration (externally powered)  
Current up to 22mA max Source configuration (Internally powered)  
Typical output ranges: 0-5V, 1-5V, 0-10V, 4-20mA (Source)

#### CONTROLS

Zero / Span: 15 turn potentiometers to calibrate Output.

#### INDICATOR

Amber Led: power ON indicator

#### PERFORMANCE

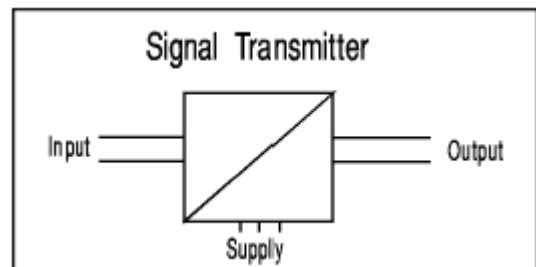
Response time: Typically < 400mS  
Linearity :  $\pm 0.1\%$

#### PROTECTION

Isolation 1000V RMS\*. Input/Output/Supply  
Internal Fuse.  
Fail safe on loss of power  
Input over range typically at 300%.  
Output saturation 125%.



### FUNCTION BLOCK DIAGRAM



### ENVIRONMENTAL CONDITION

Storage temperature: - 40 to +70 °C  
Operating Ambient: -15 to +55 °C  
Relative Humidity: 5 to 95% RH

### MOUNTING / DIMENSION

Card 3U high 4E wide  
Mounting: Existing 16way GEM80 8405 series subrack  
Card weight < 200g

### ADD ON / OPTIONS

P: Test Point (output monitoring)  
Non standard Power supply ranges available