

AH-GEM 710 Thermocouple Temperature Transmitter

- Suitable for Upgrade/Replacement of original GEM80 8410 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 mV signal from thermocouple Type S, R, B, J, K, T, E, N and other special types also available on request.

Automatic Cold Junction compensation fitted as standard.

Typical input: 0 – 500 Deg °C / TC type “K”

OUTPUT

DC current or voltage specified in the range of:
 Current up to 100mA max in Sink configuration (externally powered)
 Current up 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

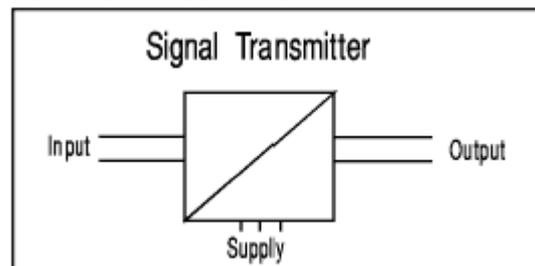
Response time: Typically < 400mS
 Linearity : ±0.1%

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

J : Input injection jack socket
 P: Test point (Trip set point monitoring)
 Non standard Power supply ranges available