

AHM710GXX (17T2551-B) Thermocouple Temperature Transmitter

- Suitable for any BS4937 Thermocouple input types
- Supply voltage 21-30Vdc
- AMELEC Standard 10 year warranty
- Suitable for SIL 1 & SIL 2 rated (IEC61508) safety system loop applications, as 1oo1 architecture (HFT:0)

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.
(External compensation option available)

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

LINEARISED 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)
Voltage any from 0.4 to 20V max @ up to 20mA.

Typical output range: 4 - 20mA (Source port, max load 1200Ω)

CONTROLS

Zero / Span: 15 turn potentiometers to calibrate Output.

SUPPLY VOLTAGE

Nom 24Vdc Buss line within Rack Backplane.
Single customer supply termination point at rear of rack

TEST POINTS

Optional O/P Test Point on Front Fascia available on request, to allow for monitoring of the output signal
(supplied with Test Plug on flying leads)

INDICATOR

Amber LED: Power ON indicator

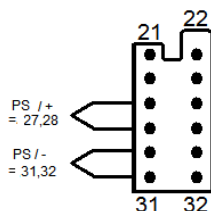
PERFORMANCE

Response time: Typically < 200mS
Output Linearised to Temperature: $\pm 0.1\%$ span
Accuracy/Linearity: $\pm 0.1\%$ span
Consumption: <3VA

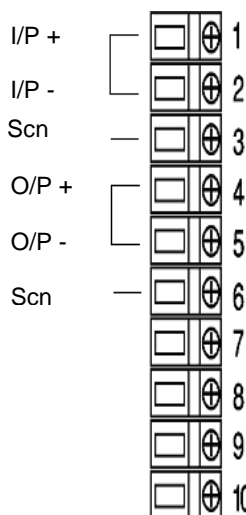
PROTECTION

Isolation 1000V RMS*. Input/Output/Supply/Earth
*(500Vdc when RFI 'K' option specified)
Internal Fuse.
Input over range typically at 300%.
Output saturation 125%

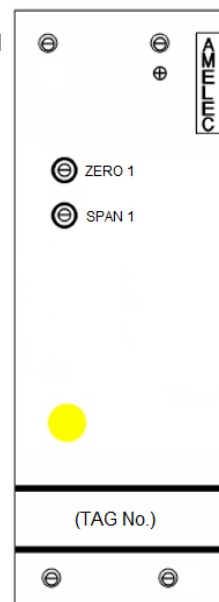
Internal 24Vdc SUPPLY BUSS



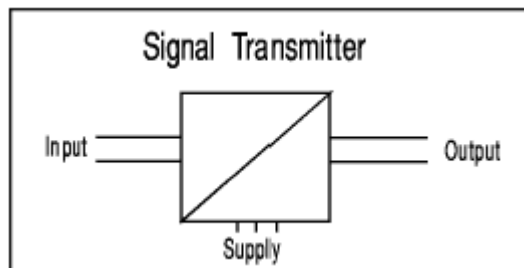
Back Plate TERMINATION



FRONT VIEW



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

Plug-in instrument Card with 8E wide front plate
Mounting: 3U high 19" rack / 84E wide
Card weight < 200g

ADD ON / OPTIONS

DI: Common LCD display for local monitoring
P: Test point
K: RFI Protection to IEC61000-4-3:2006/A2:2010