OPTO 22

DATA SHEET

Description

Part Number	Description
G4AD10	100 Ohms Platinum RTD Input

The G4AD10 module provides a single channel of optically-isolated temperature-to-digital conversion. This module also includes complete electrical channel-to-channel isolation, which eliminates troublesome ground loop problems. Modules plug into an Opto 22 Modular controller or an analog I/O brick and are secured by a captive screw. Field connections are made to the terminal strip located on the brick base or controller I/O board. The G4AD10 is suitable for temperature measurement where the RTD probe is grounded or when ground loop currents exist. G4AD10 can be used with 2-wire, 3-wire, or 4-wire installations.

NOTE: Any system using analog sensors and input modules should be calibrated annually for analog signals. To do so, use OptoControl commands "Calculate and Set Analog Offset" and "Calculate and Set Analog Gain."

I/O MODULES
G4
ANALOG RTD INPUT

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Form 427-050809

Specifications

General Specifications

RTD input	100 Ω platinum ($\propto$ = 0.00385)
Nominal temperature range °C	-50° to 350° C
Nominal temperature range °F	-58° to 662° F
Over/under range °C	-72° to 812° C
Over/under range °F	-97.6° to 1493° F
Accuracy*	±0.8° C
Resolution	12 bits
Response time	Full-scale step change in 100 ms
Isolation (Transient) Input-to-output Input-to-analog supply	4,000 Vrms 4,000 Vrms
Ambient temperature Operating Storage	0° to 70° C -25° to 85° C

*Accuracy figure requires use of gain and offset commands.

Connections

3-WIRE CONNECTION
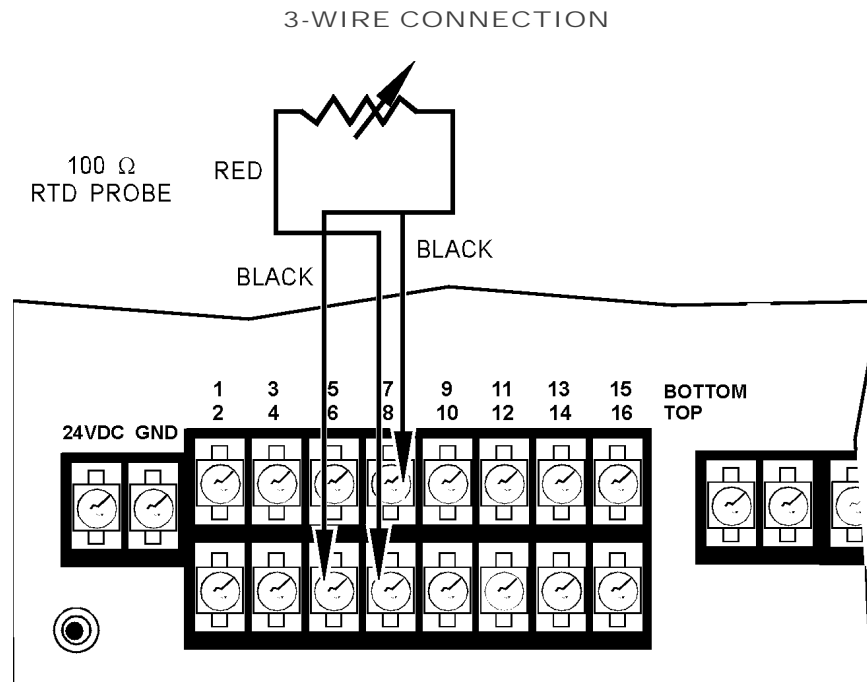
NOTE: PICTURE SHOWS CONNECTION FOR MODULE IN POSITION 1.