TEMPSENS

High Accuracy Temperature Indicator Suitable for 6 RTD's and 10 T/C Types

CALSYS C-4004

Calsys C-4004 is fully characterized for all major sensors (thermocouples such as B, C, D, E, J, K, N, R, S, T and RTD's like PT-100, PT-50, PT-10, PT-200, PT-500, PT-1000). The instrument can be used in industries where high accuracy temperature measurement is essential. Two channel input provides A, B & A-B measurement on LCD Display. The device is providing exceptionally stable cold junction compensation with choices for user like Automatic, Off and External.

Calsys C-4004 comes with front panel keys for easy operation like unit selection (°C/°F), Resolution (0.01/0.001) and Data Logging.

Overall stability is optimized by utilizing high quality components with high precision. There are four input ports, two for thermocouple and two for RTD.

In order to measure temperature suitable probe should be connected to TC & RTD input. The temperature measured by the device will be displayed in bigger fonts and the actual resistance (ohms) in case of RTD and voltage (mV) in case of Thermocouple will be displayed in smaller fonts. All channel details and configuration will be displayed on the LCD display.

Calsys C-4004 can accept two RTD's, or two Thermocouples or one RTD and one Thermocouple at a time. Measured temperature can be displayed from one of the inputs or Difference of both the input channels.

Features

- High stability
- High accuracy of RTD measurement 0.01°C
- High accuracy of T/C measurement 0.1°C
- High Resolution (0.01/0.001)
- 2 Measuring inputs
- 10 Thermocouples **B, C, D, E, J, K, N, R, S, T**
- 6 RTD's **PT-100, PT-10, PT-50, PT-500, PT-200, PT-1000**
- Thermocouple reference junction external, internal and off
- Units °C/ °F
- Data Logging 1800 values
- Suitable for 2/3/4 wire RTD.

Data Logging

The Calsys C-4004 includes an inbuilt data logger internally storing upto 1800 values for both the channels with date and time.

High Accuracy

Highest accuracy is for PT-100 input, Calsys C-4004 is providing accuracy of 0.01°C in the temperature range of -100 to +500°C, 0.02°C accuracy for -200 to -100°C and 0.02°C for +500 to +800°C.

Accuracy for thermocouple measurement (B, C, D, E, J, K, N, R, S, T) is 0.1°C.

Technical Specifications

Display	192x64 LCD Graphic Panel with back light
Inputs	2 Channels for RTD and Thermocouple via lemo 1-S series connector
Reference Junction	Reference Junction compensation may be selected for the following modes : **Automatic** : Internal reference junction range 0 to +100 °C **External** : Via Pt 100 sensor connected to channel A and B range to 0 to +100 °C **Off** : Turns the Reference Junction OFF = 0° C
Working Temperature	0....50°C rel. humidity Less than 90% non condensing condition
Storage Temperature	-20 to +55 °C
Mains Supply	85-264 VAC / 120-370 VDC 47-63 Hz
Data Logging	Up to 1800 values can be stored along with date and time
Dimensions	224 x 318 x 90

Input Sensor Range

THERMOCOUPLE SENSOR TYPE	TEMPERATURE RANGE	RESOLUTION	ACCURACY @ 20±5°C
Type K Thermocouple	-200°C to 1372°C	0.01	±(0.01°C + 0.006% FS)
Type J Thermocouple	-210°C to 1200°C	0.01	±(0.008°C + 0.005% FS)
Type E Thermocouple	-200°C to 1000°C	0.01	±(0.01°C + 0.004% FS)
Type N Thermocouple	-200°C to 1300°C	0.01	±(0.01°C + 0.005% FS)
Type R Thermocouple	0°C to 1768°C	0.01	±(0.005°C + 0.015% FS)
Type S Thermocouple	0°C to 1768°C	0.01	±(0.005°C + 0.015% FS)
Type B Thermocouple	400°C to 1820°C	0.01	±(0.02°C + 0.006% FS)
Type T Thermocouple	-250°C to 400°C	0.01	±(0.005°C + 0.015% FS)
Type C Thermocouple	0°C to 2315°C	0.01	±(0.075°C + 0.005% FS)
Type D Thermocouple	0°C to 2315°C	0.01	±(0.075°C + 0.005% FS)

RTD SENSOR TYPE	TEMPERATURE RANGE	RESOLUTION	ACCURACY @ 20±5°C
PT-100	-200°C to -100°C	0.001	0.02°C
PT-100	-100°C to +500°C	0.001	0.01°C
PT-100	+500°C to +800°C	0.001	0.02°C
PT-10	-200°C to +800°C	0.001	0.02°C
PT-50	-200°C to +800°C	0.001	0.02°C
PT-200	-200°C to +800°C	0.001	0.02°C
PT-500	-200°C to +800°C	0.001	0.02°C
PT-1000	-200°C to +800°C	0.001	0.02°C

TEMPSENS
Tempsens Instruments (I) Pvt. Ltd. U# I
B-188A, Road No. 5, M.I.A.,
Udaipur-313003 (Rajasthan) INDIA
Ph. : +91-294-3057700 to 800
Fax : +91-294-3057750
E-mail : info@temsens.com