Sineax V 624 Programmable Temperature Transmitter, Isolated

Inputs: ***Thermocouple or RTD***
Output: ***Programmable Ranges From 0-20 mA or 20-0 mA, 0-10 V or 10-0 V***

- **RTD and T/C Isolated Transmitter**
- **Plug-In Connectors Simplify Installation**
- **Programmable Sensor Fault Action**
- **Powered by 24-60 VAC/VDC or 85-230 VAC/VDC**

CE

Removable Plugs for Easy Hookup

ISO 9001 : 2000

Specifications

RTD Input	2-, 3-, 4-wire, Pt100, Ni100
T/C Input	J, K, T, E, R, S, N, B, L, U, W-Re
Output	0-20 or 4-20 mA to 20-0 mA, 2 mA min. span 0-2 V to 0-10 V, 10-0 V, 1 V min. span
Burden	12 V for current, see data sheet for voltage
Accuracy	Better than ±0.2%, typical
Dielectric Test	2300 VAC
Ambient	Operation –25 to 55°C, storage –40 to 70°C
Power Supply	24-60 VAC/VDC or 85-230 VAC/VDC

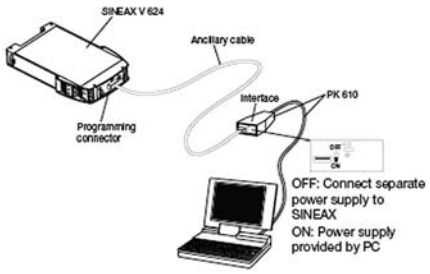
Description and Features

The **SINEAX V 624** is designed for measuring temperature in combination with thermocouples or RTDs. The output is linearized with temperature. The analogue output signal current or voltage and is linearly proportional to temperature.

The sensor circuit is monitored for open and short-circuits and the output responds in a defined manner if one is detected.

The input type and measuring range are programmed with the aid of a PC and the corresponding software. A power supply does not need to be connected for programming.

Other programmable parameters: specific sensor type (e.g. two, three or four-wire connection for RTDs, internal or external cold junction compensation of thermocouples etc.), transmission mode, operating sense (output signal directly or inversely proportional to the measured variable) and open-circuit sensor supervision (output signal assumes fixed preset value between – 5 and 110%).



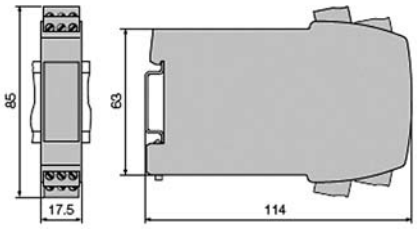
Models & Options

See data sheet at apicb.com for complete specifications or consult factory.

Can be factory programmed to your specifications. Please specify:
T/C type or 2-, 3- or 4-wire RTD, range in °F, °C, or K, internal or external CJC for T/C, 4-20 or 20-4 mA output, sensor fault output, response time if >2 sec, 50 or 60 Hz ripple suppression, optional test certificate if required.

Model	Output	Power Supply
V 624-9110	4-20 mA	24-60 VAC/VDC
V 624-9210	4-20 mA	85-230 VAC/VDC
V 624-9120	0-10 V	24-60 VAC/VDC
V 624-9220	0-10 V	85-230 VAC/VDC

PK 610-A Programming cables and V 600 *Plus* software

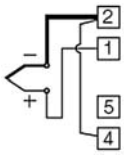


Sineax V 624 Cold Junction Compensation

Internal Cold Junction Compensation on the V 624

Using internal cold junction compensation is the most convenient and common method for connecting thermocouples to transmitters. Thermocouple wire or thermocouple extension wire must be used. To use the internal cold junction compensation circuit on the V624 do the following.

1. When programming the unit set the configuration software to “internal thermo-element” and “Pt 100 built-in”.
2. You must add a copper jumper wire from pins 2 to 4 to activate the internal CJC circuitry. The unit will go into upscale burnout (110% of full scale output) if you do not add the jumper.

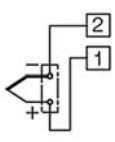


Jumper terminals 2 and 4 for internal CJC

External Cold Junction Compensation on the V 624

External cold junction compensation is an alternate method for connecting thermocouples to transmitters. This technique uses an external cold junction compensating device such as an electronic “ice point” and copper wire to connect to the transmitter. To use the external CJC circuit on the V 624, do the following.

1. In the setup program change the measuring method to “externally compensated thermocouple.”
2. Do not add a jumper between terminals 2 and 4.



Connection to terminals 2 and 4 for external CJC

Temperature

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For latest product information or to contact your local representative visit api-usa.com