



RTD I/O Modules

The RTD Input Modules provide six RTD inputs that allow the direct connection of 3-wire RTD temperature sensors without using external signal processing (transducers, transmitters, etc.). All analog and digital processing of the RTD signal is performed on the module.

	HE693RTD600	HE693RTD601	HE693RTD660	HE693RTD665	HE693RTD666
Product Name	RTD Input Module, Low Resolution	RTD Input Module, High Resolution	RTD Input Module, Isolated	RTD Input Module, Isolated	RTD Input Module, Isolated
Module Type	RTD Input	RTD Input	RTD Input	RTD Input	RTD Input
Number of Channels	6	6	6	6	6
RTD Types Supported	3-wire, Pt-100E, Pt-100C, Pt-100Z, Pt-1000, Cu-10, Cu-50, PT-100, Cu-53, Cu-100, Ni-120, TD5R, TD5R, Pt-90 (MIL-7990)	3-wire, Pt-100E, Pt-100C, Pt-100Z, Pt-1000, Cu-10, Cu-50, PT-100, Cu-53, Cu-100, Ni-120, TD5R, TD5R, Pt-90 (MIL-7990)	3 wire, Pt-100E, Pt-100C, Ni-120, Cu-10, Pt-1000, TD5R Si	3 wire, Pt-100E, Pt-100C, Ni-120, Cu-10, Pt-1000, TD5R Si	3 wire, Pt-100E, Pt-100C, Ni-120, Cu-10, Pt-1000, TD5R Si
Channel-to-Channel Isolation	N/A	N/A	5 VAC	5 VAC	5 VAC
Notch Filter	N/A	N/A	None	50 Hz	60 Hz
Resolution	0.5°C or 0.5°F	0.125°C, 0.1°C, or 0.1°F	0.05°C, 0.05°F, 0.1°C, 0.1°F, 0.5°C or 0.5°F	0.05°C, 0.05°F, 0.1°C, 0.1°F, 0.5°C or 0.5°F	0.05°C, 0.05°F, 0.1°C, 0.1°F, 0.5°C or 0.5°F
Accuracy	±0.5°C, typical	±0.5°C, typical	±0.3°C	±0.3°C	±0.3°C
Input Impedance	>1000 Megohms	>1000 Megohms	>1000 Megohms	>1000 Megohms	>1000 Megohms
Fault Protection	Zener Diode Clamp	Zener Diode Clamp	Suppression Diode	Suppression Diode	Suppression Diode
Update Time	50 Channels/second	50 Channels/second	50 Channels/second	50 Channels/second	50 Channels/second
A/D Conversion Type	18 bit, integrating	18 bit, integrating	18 bit, integrating	18 bit, integrating	18 bit, integrating
Average RTD Current, Pt-100	330 microamps	330 microamps	330 microamps	330 microamps	330 microamps
Channel-to-Channel Tracking	0.1°C	0.1°C	0.1°C	0.1°C	0.1°C
Channel-to-Bus Isolation	N/A	N/A	1500 VAC	1500 VAC	1500 VAC
RTD Short	N/A	N/A	Indefinite without damage	Indefinite without damage	Indefinite without damage
Connector Type	Terminal Block (20 screws), included with module.	Terminal Block (20 screws), included with module.	Terminal Block (20 screws), included with module.	Terminal Block (20 screws), included with module.	Terminal Block (20 screws), included with module.
Internal Power Used	70 mA @ 5 VDC	70 mA @ 5 VDC	200 mA @ 5 VDC	200 mA @ 5 VDC	200 mA @ 5 VDC