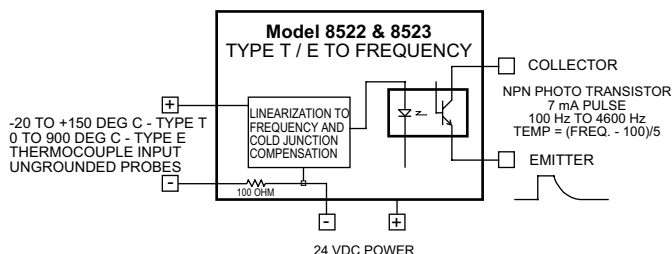
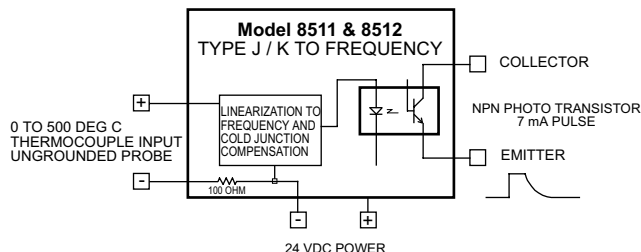


Models 8511, 8512, 8522, 8523

Types J, K, T, and E Thermocouple to Frequency

Model 8511, 8512, 8522 and 8523 thermocouple to frequency converters are designed to operate into the common 24 volt, 7 mA PLC high speed counter inputs. Their output is an isolated optocoupler transistor and provides DC isolation from the input and DC power. They operate with a DC supply

of 15 volts to 26 volts at 15 mA. The module's housing is plastic with a U-foot for mounting on standard DIN rails. The unit's dimensions, excluding the mounting foot, are 1.65" H x 1.06" W x 3.78" L. Connections are made to screw clamp terminal blocks.



Type J and K Thermocouple

Model	8511	8512
Input	Type J Thermocouple 0°C to 500°C	Type K Thermocouple 0°C to 500°C
	Use Ungrounded Probes	
Output	100 Hz at 0° to 5100 Hz at 500°C	100 Hz at 0° to 5100 Hz at 500°C
Resolution	0.1°C for 1 second Time Base 12 Bits	0.1°C for 1 second Time Base 12 Bits
Accuracy	±2°C plus conformity error	±2°C plus conformity error
Cold Junction Compensation +2° to 55°C	±.05°C/°C Typical	±.05°C/°C Typical
Output Source	Floating Optocoupler Transistor, 7 mA Minimum Current	
Pulse Width	50 µs Typical	50 µs Typical
Response Time	1 second	1 second
Isolation	700 Volts DC	700 Volts DC
Input to Output Transistor	5 pF	5 pF
Power Requirements		
Voltage	15 to 26 Volts DC	15 to 26 Volts DC
Current	15 mA Typical	15 mA Typical
	Power supply connected to thermocouple negative input lead through 100 ohms	
Environment		
Operating	+2° to +55°C	
Storage	-40°C to +80°C	
Size	1.65"H x 1.06"W x 3.78"L (42 x 27 x 96 mm)	
Weight	3 oz. (85 grams)	
Agency Approvals	UL 508, C22.2 No 14-M91, UL 1604, C22.2 No 213-M1987	

Type T and E Thermocouple

Model	8522	8523
Input	Type T -20°C to +150°C	Type E 0°C to +900°C
	Use Ungrounded Probes	
Output	100 Hz at -20°C to 1800 Hz at +150°C Sensor temperature = (Frequency - 300) in tenths of a degree	100 Hz at 0°C to 4600 Hz at 900°C
Accuracy	±2°C, -20°C to +150°C	±2°C, 0°C to 800°C ±0.4% to 900°C Does not include thermocouple error limits if 1.7°C or 0.5%, which ever is greater, above 0°C
Cold Junction Compensation +2° to 55°C Ambient	±1.5°C at 25°C Ambient ±.05°C / °C Typical	±1.5°C at 25°C Ambient ±.05°C / °C Typical
Output Source	Floating Optocoupler Transistor	
Pulse Width	7 mA Minimum Current 50 microseconds Typical	7 mA Minimum Current 50 microseconds Typical
Response Time	1 sec	1 sec
Isolation	500 Volts DC	700 Volts DC
Input to Output Resistance	5 pF	5 pF
Power Requirements		
Voltage	10 to 26 Volts	10 to 26 Volts
Current	15 mA Typical	15 mA Typical
	Power Supply common connected to thermocouple negative input lead through 100 Ohms	
Environment		
Operating	+2°C to +55°C	
Storage	-40°C to +80°C	
Size	1.65"H x 1.06"W x 3.78"L (42 x 27 x 96 mm)	
Weight	3 oz. (85 grams)	
Agency Approvals	UL 1604, C22.2 No 213-M1987	