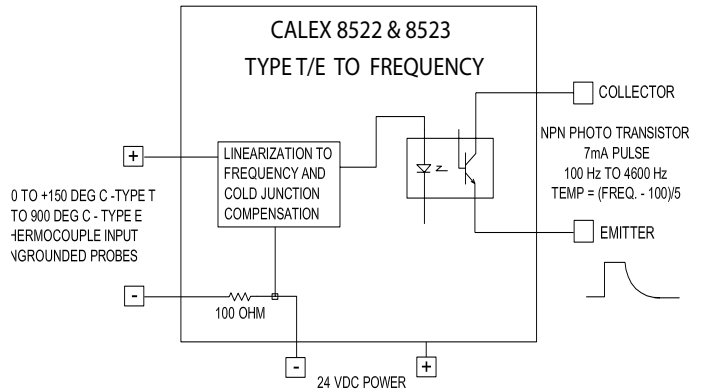
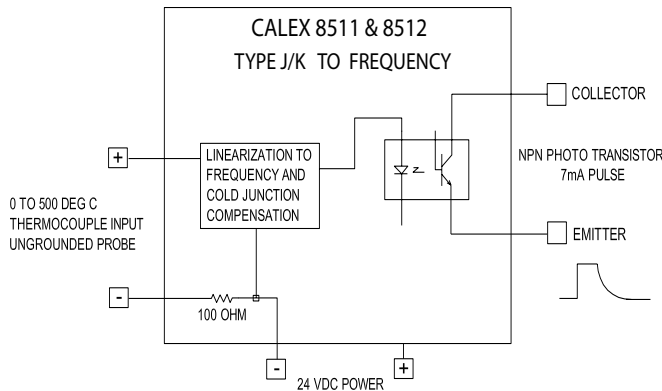


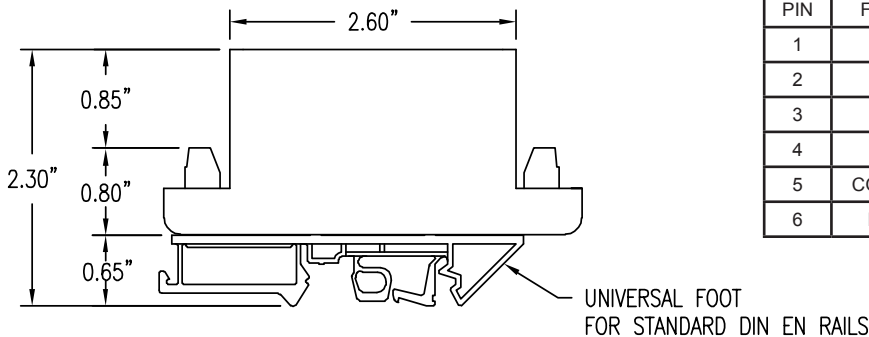
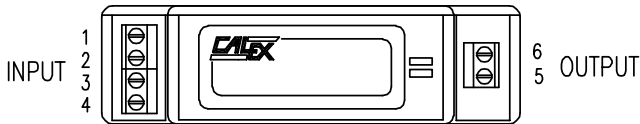


**Model 8511, 8512, 8522 and 8523** thermocouple to frequency converters are designed to operate into a common 24 volt, 7 mA PLC high speed counter input. The output is an isolated optocoupler transistor and provides DC isolation from the input and DC power. They operate with a DC supply of 15 volts 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.



Model	8511	8512
Input	Type J Thermocouple 0°C to 500°C	Type K Thermocouple 0°C to 500°C
<b>Use Ungrounded Probes</b>		
Output	100 Hz at 0°C to 5100 Hz at 500°C	100 Hz at 0°C 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°C to 55°C	±0.05°C / °C Typical	±0.05°C / °C Typical
Output Source	Floating Optocoupler Transistor, 7mA Minimum Current	
Pulse Width	50 µs Typical	50 µs Typical
Response Time	1 second	1 second
Isolation Input to Output Transistor	700 Volts DC 5 pF	700 Volts DC 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 Storage	+2°C to +55°C -40°C to +80°C	
Size (Not including universal foot)	1.65"H x 1.06"W x 3.78"L (42 x 27 x 96 mm)	
Weight	3 oz (85 grams)	
Agency Approvals	UL508, C22.2 No 14-M91	

Model	8522	8523
Input	Type T -20°C to +150°C	Type E 0°C to 900°C
<b>Use Ungrounded Probes</b>		
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 to 800°C ±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°C to 55°C Ambient	±1.5°C at 25°C Ambient ±0.05°C / °C Typical	±1.5°C at 25°C Ambient ±0.05°C / °C Typical
Output Source	Floating Optocoupler Transistor	
Pulse Width	7 mA Minimum Current 50 µs Typical	7 mA Minimum Current 50 µs Typical
Response Time	1 second	1 second
Isolation Input to Output Transistor	500 Volts DC 5 pF	700 Volts DC 5 pF
Power Requirements		
Voltage	10 to 26 Volts DC	10 to 26 Volts DC
Current	15 mA Typical	15 mA Typical
Power supply common connected to thermocouple negative input lead through 100 ohms		
Environment Operating Storage	+2°C to +55°C -40°C to +80°C	
Size (Not including universal foot)	1.65"H x 1.06"W x 3.78"L (42 x 27 x 96 mm)	
Weight	3 oz (85 grams)	
Agency Approvals	UL508, C22.2 No. 14-M91	



	MODEL 8511	MODEL 8512	MODEL 8522	MODEL 8523
PIN	FUNCTION	FUNCTION	FUNCTION	FUNCTION
1	WHITE	YELLOW	BLUE	VIOLET
2	RED	RED	RED	RED
3	COM	COM	COM	COM
4	+24VDC	+24VDC	+24VDC	+24VDC
5	COLLECTOR	COLLECTOR	COLLECTOR	COLLECTOR
6	EMITTER	EMITTER	EMITTER	EMITTER

