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MTL1271 loop powered thermocouple converter

1 channel for type J and K thermocouple sensors

The **MTL1271** is a single channel signal converter which can accept type J or K thermocouple inputs and converts the signal to 4-20mA for connection to a powered system input. Ranges are selected by the user using switches on the module.



Terminals	Function
1	Input +
2	Input -
5	Current sink+
6	Current sink-

SPECIFICATION See also common specification	
Number of channels	One, with fully floating input and output
Location of equipment	Safe area
Input signal	Type J or K thermocouples
Range selection	Via switches, refer to instructions
Output signal	4-20mA, current sink, maximum load 50 (Vs- 17) Ω
Over-range	>103%
Field input resistance	>100ΚΩ
Cold Junction Compensation accuracy	±1°C
Response time	500mS
Transfer Accuracy at 20 °C	+/- ((0.65/Span)+(0.001)) x100%
Temperature drift	<0.01% /°C
Power supply voltage	18V to 32V DC
Maximum power dissipation within unit	<0.6W @ 32V dc with 250Ω load
Isolation	250V ac or dc functional isolation between power, field and system circuits. (Tested to 1100Vac)



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