



SEM1500/TC

- > **INPUT: J, K, N, T, R, S THERMOCOUPLE**
- > **GALVANICALLY ISOLATED**
- > **SMALL SIZE**
- > **4-20 mA OUTPUT**
- > **DIN RAIL MOUNTED**
- > **HIGH PERFORMANCE**



INTRODUCTION

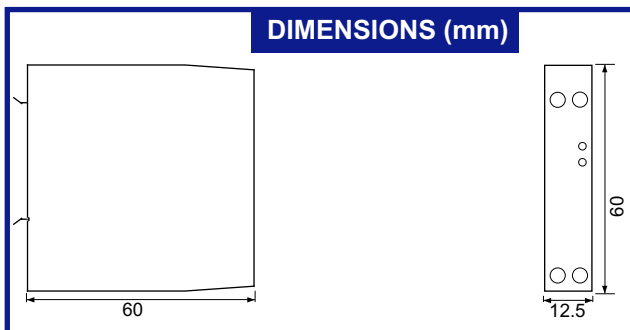
The SEM1500/TC Rail-mounted Isolating Thermocouple Transmitter provides accurate and reproducible conversion of most thermocouple inputs to industry standard 4-20 mA output. The unit can also accept strain gauge input or any millivolt input between -5 and +50 mV. Automatic cold junction compensation is provided to be used with thermocouples or fixed zero compensation may be selected for mV or differential thermocouple measurement.

The small size of the unit enables many units to be fitted in a small space, and a high packing density to be achieved. The output signal is galvanically isolated from the thermocouple by 500 volts DC to remove the effect of earth loop or earth leakage.

The versatility of this temperature transmitter results in lower stock holdings and greater operational flexibility. The transmitter can easily be configured in the field for any range from -100°C to +1600°C.

SPECIFICATIONS @ 20°C

Thermocouple Input	Types J, K, N, T, R, S
Millivolt Input	-5 to +50 mV
Isolation	Input to output; 500 VDC (flash tested to 1 KV)
Impedance	>1 MΩ
CJ Compensation	Used for thermocouples and fixed zero compensation for mV input
Accuracy CJ @ 20°C Overall	±0.2°C ± 0.05°C/°C 0.1% FRO
Output Type	Passive 2-wire current
Output Range	4...20 mA (30 mA max.)
Linearity	±0.02% FRO
Supply Voltage	10...30 VDC
Load	700 Ω @ 24 V maximum
Electrical Protection	Reverse connection; Over voltage
Thermal Stability	2 μV/°C plus CJ errors
Response Time	200 ms to reach 70% of value
Burnout Action	Upscale standard
Case Material	Polyamide
Ambient	0...+50°C; 10 to 95% RH
Mounting	Rail mounting
Environ. Protection	IP-20



SEM1503/P IS ALSO AVAILABLE FOR Pt-100 RTD INPUT

FOR SMART VERSION OF THE SEM1500/TC TRANSMITTER, SEE SEM215 CATALOGUE

