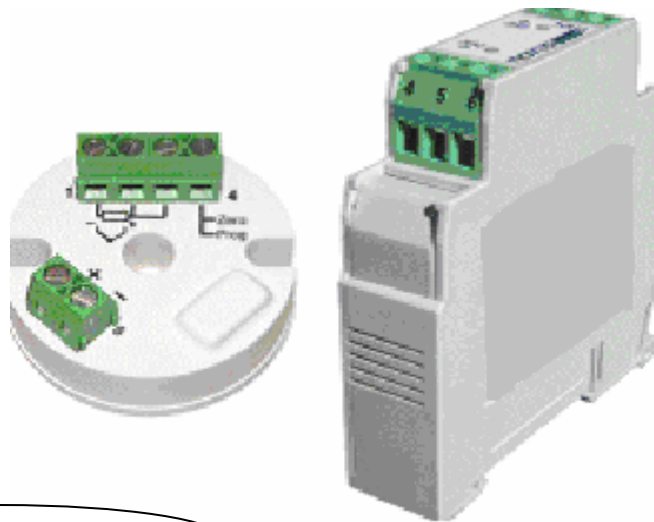




Temperature management by design

MICROPROCESSOR BASED NON-ISOLATED TEMPERATURE TRANSMITTER



R11 EHIRNOV Model

R11 EHIRNOV Head mount and Din Rail mount units are fully programmable isolated temperature transmitters dedicated to Pt100 and thermocouple industrial sensors. Both units can be easily user configured for input type and working range by means of an interface cable connected to a PC by RS-232 port

Servotech R11 non-isolated transmitters are a 2-wire in-head temperature transmitters. Microprocessor based, it was designed for flexibility accepting mV, Pt100 and a variety of thermocouples as the input sensor. The R11 delivers a scalable linear 4-20mA output current proportional to the sensor temperature. Servotech provides transmitter configuration for parameter setup (sensor type, temperature range, filter, etc). Call our technicians on ++64-9-415 8361 for assistance

Servotech R11 non-isolated transmitters are available in Head Mount and Din-Rail Mount design.

Technical Specifications

Sensor input: User defined. The following is a range of supported sensor

Sensor Type	Range	Minimum measurement span
Thermocouple K	0 to 1370°C	100°C
Thermocouple J	0 to 760°C	100°C
Thermocouple R	0 to 1760°C	400°C
Thermocouple S	0 to 1760°C	400°C
Thermocouple T	0 to 400°C	100°C
Thermocouple N	0 to 1300°C	100°C
Thermocouple E	0 to 720°C	100°C
Pt100	-200 to 530°C	40°C
Voltage	0 to 50mV	5mV

Thermocouples: Types J, K, R, S, T, N and E according to IEC 60584(ITS-90). Impedance » 1MΩ

Pt100: Excitation: 180µA. 2 or 3-wire connection (for 2-wire sensors, tie terminals 2 and 3 together). $\alpha = 0.00385$, according to IEC 60751(ITS-90).

Voltage: 0 to 50mVdc, Impedance » 1 MΩ

Output	2-wire 4-20mA, linear with respect to the measured temperature
Total accuracy	better than 0.3% of the maximum range for thermocouples and 0.2% for Pt100 and voltage
Resolution	0.004 A (12 bits)
Response Time	< 100 ms
Power supply	12 to 35Vdc, across the transmitter
Maximum load (RL)	$RL (max.) = (V_{cc} - 12) / 0.02 [\Omega]$, where: V_{cc} = Power supply voltage
Operating Temperature	-40 to 85°C
Humidity	0 to 90% RH
Electromagnetic compatibility	EN 50081-2, EN 50082-2
Housing	ABS plastic. Dimensions. 44mm (diameter) x 25mm (height)

Internal protection against polarity inversion.

Cold junction compensation for thermocouples.

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