T LINE
Loop powered transmitters

T121

Universal temperature transmitter (loop power supply)

OUTPUT
4..20 / 20..4 mA, 2 wire

POWER SUPPLY
7..30 Vdc

SETTINGS
PC software (KT120): start/full scale, rejection, Sensor type, cable resistance, over-range etc.

INPUT
Pt100, Ni100, Pt500, Pt1000, TC J , K, R, S, T, B, E, N, potentiometer, voltage

CE

Accuracy class	0,1%
Max A/D resolution	16 bit
Galvanic isolation	1500 Vac
Electrical connections	Spring clamps - *push wire*
Operating temperature	-40..+85°C

➲For further information, please visit www.seneca.it

SENECA

T121

Universal temperature transmitter (loop power supply)

TECHNICAL FEATURES

T121 – Universal temperature transmitter (loop power supply)

ORDER CODES

Codes		Description
Model	T121	Universal temperature transmitter (loop power supply)
Accessories and programming	S117P	Configuration tool-kit inclusive of USB – RS232/TTL converter, PM002411 (cable), T120, EASYLP (programming software)

GENERAL FEATURES

Power supply	7-30 Vdc
Current Output	4..20 / 20..4 mA
Load resistance	1 kΩ @ 26 Vdc, 21 mA
A/D resolution	2 µA (> 13 bit); max 16 bit
Over range output	102,5% of full scale
Fault output	105% of full scale
Current output protection	30 mA, about
Rejection	50-60 Hz
Max transmission error	0,1% (of full scale) or 0,1°C
EMI	< 0,5%
Cable resistance	0,005 Ω/Ω
Temperature coefficient	<100 ppm (30 ppm typical)
Sampling time	300 ms
Response time (10..90%)	< 620 ms
Protection degree	IP 20
Approvals	CE, EN 61000-6-4, EN 61000-6-2

THERMOMECHANIC FEATURES

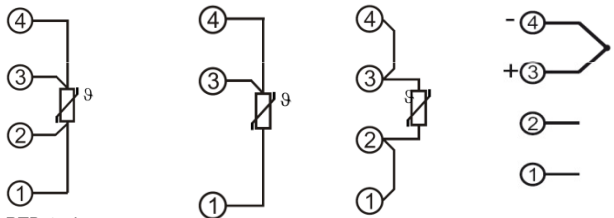
Operating temperature	-40..+85 °C
Humidity	30-90% @ 40°C (non condensing)
Storage temperature	-40..+105°C
Electtrical connection	Spring clamps
Wire size	0,2..2,5 mm²
Wire skinning	8 mm
Housing	Nylon / glass
Dimensions	20 mm, Ø 43,7 mm

INPUTS

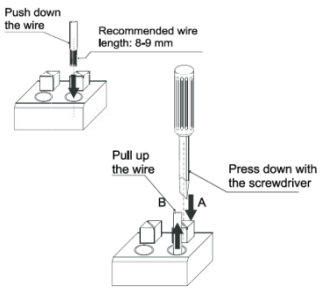
Pt100	EN 60751/A2 (ITS-90); range: -200..+650°C, Min span 20°C; 2, 3, 4 wires
Ni100	Range: -60..+650°C, min span: 20°C; 2, 3, 4 wires
Pt500	Range: -200..+650°C; 2, 3, 4 wires
Pt1000	Range: -200..+200°C; 2, 3, 4 wires
Thermocouple	Type J , K, R, S, T, B, E, N
Potentiometer	450..1800 Ω (up to 100 kΩ with parallel resistance)
Voltage	-150..+150 mV

ELECTRICAL CONNECTIONS

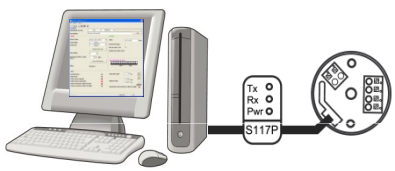
INPUT



PUSH WIRE SYSTEM



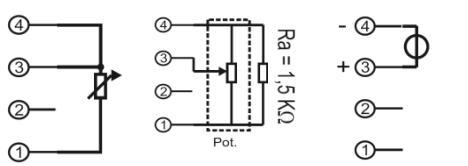
SETTINGS (THROUGH SOFTWARE)



PC SETTINGS

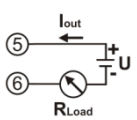
Easy programming through S117P tool-kit, inclusive of EASYLP: start / full scale, RTD type wiring, rejection, filter, cable resistance , fault sensor output / over-range

INPUT



Resistance | Potentiometer | Voltage (mV)

OUTPUT



Current, loop power

FRONTAL SIDE

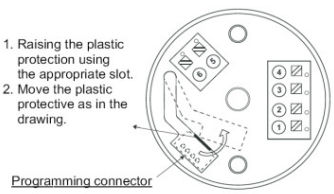


DIAGRAM : LOAD RESISTANCE