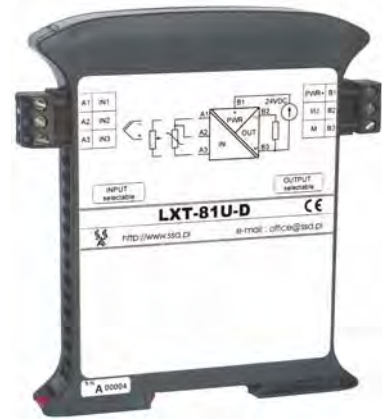
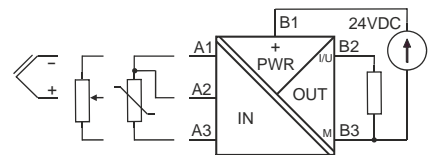
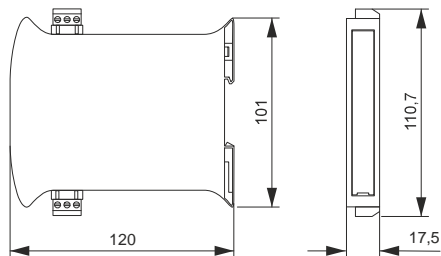


- All parameters selected by DIP switches.
- Resistance input: Pt100, Ni100, Cu100, Pt1000, Ω , potentiometer.
- Voltage input: B, J, K, N, R, S, mV.
- Current output: 0...5 mA, 0...20 mA, 4...20 mA.
- Voltage output: 0...5 V, 0...10 V.
- Galvanic isolation input/output.
- Sensor break signalization.
- All sensors linearization.
- High reliability and accuracy.
- Detachable, fast and reliable wire connectors.
- Slim, rail and fast click mounted housing.
- Special versions on request.



The LXT-81U-D transducer converts temperature from an input sensor to the output signal 0...5 mA, 0...20 mA, 4...20 mA, 0...5 V or 0...10 V with galvanic separation between an input sensor and the output. A device assures cold junction compensation (if thermocouple is connected as input signal) or it makes input wire resistance compensation (if resistive element is connected). Each output signal may be inverted. DIP switches on the front panel allow for easy and comfortable setting all parameters like sensor, operating range, compensation, output signal and sensor break signalization. There is possibility to deliver device for non-standard signals on demand.



CJC: 0°C 1 1 SB: MAX
 CJC: AUTO 0 0 SB: MIN

INPUT

1	2	3	4	5	6	7	8	9	10
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ON 1
 OFF 0

-50...100°C	→	0 0 0 0	0 0 0 0	←	J
-50...50°C	→	0 0 0 1	0 0 0 1	←	K
0...50°C	→	0 0 1 0	0 0 1 0	←	N
0...100°C	→	0 0 1 1	0 0 1 1	←	S
0...150°C	→	0 1 0 0	0 1 0 0	←	R
0...200°C	→	0 1 0 1	0 1 0 1	←	B
0...300°C	→	0 1 1 0	0 1 1 0	←	Pt100
0...400°C	→	0 1 1 1	0 1 1 1	←	Ni100
0...500°C	→	1 0 0 0	1 0 0 0	←	Cu100
0...600°C	→	1 0 0 1	1 0 0 1	←	Pt1000
0...800°C	→	1 0 1 0	1 0 1 0	←	mV (= °C/10)
0...1000°C	→	1 0 1 1	1 0 1 1	←	Ω (= °C)
0...1200°C	→	1 1 0 0	1 1 0 0	←	Poten.
0...1400°C	→	1 1 0 1	1 1 0 1	←	Ω (= °C)
0...1600°C	→	1 1 1 0	1 1 1 0	←	Ω (= °C)
SPECIAL	→	1 1 1 1	1 1 1 1	←	SPECIAL

OUTPUT

mA	0	0 0	0...5mA / 0...5V
V	1	0 1	0...20mA / 0...10V
NORMAL	0	1 0	4...20mA / 0...10V
REVERSED	1	1 1	SPECIAL

SB - Sensor Break
 CJC - Cold Junction Compensation
 SPECIAL - on request

Revision : ENG1V05



Input

■ Pt100, Ni100, Cu100, Pt1000, resistance, potentiometer	0...1600Ω
■ J, K, N, S, R, B, voltage	-5...140mV
■ sensor current	~ 0.35mA
■ input line resistance	≤ 10Ω/wire
■ input line resistance variation influence	≤ 0.005%/Ω
■ voltage source internal resistance	≤ 1kΩ
■ voltage source internal resistance variation infl.	≤ 0.1%/kΩ

Output

■ output signal	0...20mA, 0...10V (may be inverted)
- subranges	0...5mA, 4...20mA, 0...5V (may be inverted)
■ load resistance	
- current output	≤ 500Ω
- voltage output	≥ 10kΩ
■ load variation influence	≤ 0.05%
■ sensor break indication	0 or 22mA / 0 or 11V

General data

■ basic accuracy (larger value)	≤ 0.1%
- resistance input / accuracy (range) /	0.1Ω (200Ω); 0.13Ω (400Ω); 0.16Ω (800Ω); 0.2Ω (1600Ω)
- voltage input / accuracy (range) /	10μV (35mV); 13μV (75mV); 16μV (150mV)
■ response time (10...90%)	≤ 1s
■ cold junction compensation (CJC)	≤ 0.5°C
■ galvanic separation (test)	1.5kV AC, 50Hz, 1min
■ warm up time	15min

Power supply

■ supply voltage	
- nominal	24V DC
- supply voltage range	20...30V DC
■ supply current	≤ 35mA
■ supply voltage variation influence	≤ 0.03%

Temperature

■ operating temperature	0...70°C
■ temperature influence	≤ 0.01%/°C
■ temperature influence for CJC	≤ 0.1%/°C

Environment conditions

■ storage temperature	-20...85°C
■ humidity (non-condensing)	≤ 90%
■ working position	any

Housing

■ material	molded PC/ABS
■ protection housing/terminals	IP20/IP20
■ wire connections	plugs with screw terminals 1.5mm ²
■ dimensions	see drawings on the first page
■ weight	~ 100g