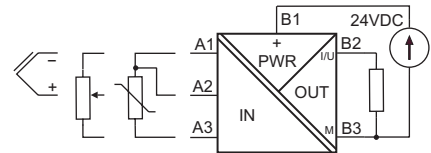
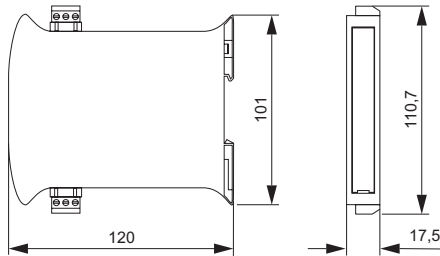


- Resistance input - Pt100, Ni100, Cu100, Pt1000,  $\Omega$ , potentiometer.
- Voltage input - B, J, K, N, R, S, mV
- Current output 0...5 mA, 0...20 mA, 4...20 mA.
- Voltage output 0...5 V, 0...10 V.
- Galvanic separation input/output.
- Sensor break signalization.
- All sensors linearization.
- High 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...5mA, 0...20mA, 4...20mA, 0...5V or 0...10V 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. Front jumpers 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

<b>INPUT</b>		ON <input type="checkbox"/>	1
		OFF <input type="checkbox"/>	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	← $\Omega$ (= °C)
0...1200°C	→ 1 1 0 0	1 1 0 0	← Poten.
0...1400°C	→ 1 1 0 1	1 1 0 1	← $\Omega$ (= °C)
0...1600°C	→ 1 1 1 0	1 1 1 0	← $\Omega$ (= °C)
SPECIAL	→ 1 1 1 1	1 1 1 1	← SPECIAL

<b>OUTPUT</b>		ON <input type="checkbox"/>	1
		OFF <input type="checkbox"/>	0

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

**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 <sup>2</sup>
■ dimensions	see drawings on the first page
■ weight	~ 100g

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