

- Input - B, J, K, N, R, S, mV.
- Current output 0...5 mA, 0...20 mA or 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.
- Single or dual independent channels.
- Detachable, fast and reliable wire connectors.
- Slim, rail and fast click mounted housing.
- Special versions on request.

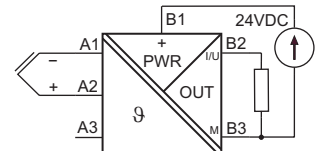
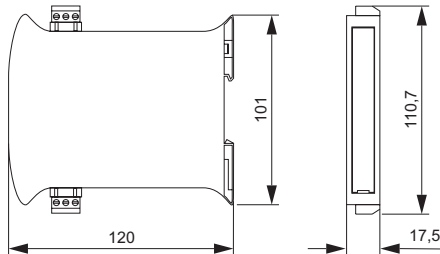
3 years warranty



The LXU-81X transducer converts temperature from the thermocouple B, J, K, N, R, S, T type or mV signal to the output signal 0...5 mA, 0...20 mA, 4...20mA, 0...5 V or 0...10V with galvanic separation between the input sensor and the output.

A device assures cold junction compensation for all thermocouples.

There is possibility to deliver device for non-standard signals on demand.



Order LXU-81X using the following code :

LXU - 81		-										
Output signal	0...20 mA	0	Standard thermocouple	J	0	1	Min	Max	Sensor break indication			
	4...20 mA	2										
	0...5 mA	3										
	0...10V	4										
	On request	S										
Input sensor	Voltage (mV)	On request	X	T	0	1	0...500°C	0...1600°C	Input span			
										0	1	-50...50°C
										0	1	0...50°C
										0	2	0...100°C
										0	3	0...150°C
										0	4	0...200°C
										0	5	0...250°C
										0	6	0...300°C
										0	7	0...400°C
										0	8	0...500°C
										0	9	0...600°C
										1	0	0...800°C
										1	1	0...1000°C
										1	2	0...1200°C
1	3	0...1400°C										
1	4	0...1600°C										

Notes:

1. If input signal is voltage, specify required span.

**Input**

- J, K, N, S, R, B, voltage -35...150mV
- voltage source internal resistance  $\leq 1\text{k}\Omega$
- voltage source internal resistance variation infl.  $\leq 0.1\%/k\Omega$

**Output**

- output signal 0...20mA, 0...10V (may be inverted)
- subranges 0...5mA, 4...20mA, 0...5V (may be inverted)
- load resistance
- current output  $\leq 500\Omega$
- voltage output  $\geq 10\text{k}\Omega$
- load variation influence  $\leq 0.05\%$
- sensor break indication 0 or 22mA / 0 or 11V

**General data**

- basic accuracy  $\leq 0.1\%$
- or larger value / accuracy (range) /  $10\mu\text{V}$  (35mV);  $13\mu\text{V}$  (75mV);  $16\mu\text{V}$  (150mV)
- response time (10...90%)  $\leq 1\text{s}$
- cold junction compensation (CJC)  $\leq 0.5^\circ\text{C}$
- 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  $\leq 35\text{mA}$
- supply voltage variation influence  $\leq 0.03\%$

**Temperature**

- operating temperature 0...70°C
- temperature influence  $\leq 0.01\%/^\circ\text{C}$
- temperature influence for CJC  $\leq 0.1\%/^\circ\text{C}$

**Environment conditions**

- storage temperature -20...85°C
- humidity (non-condensing)  $\leq 90\%$
- [Q] 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