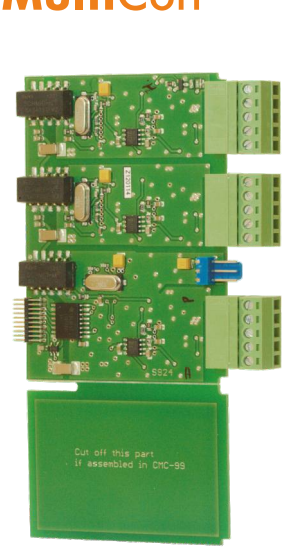
MultiCon

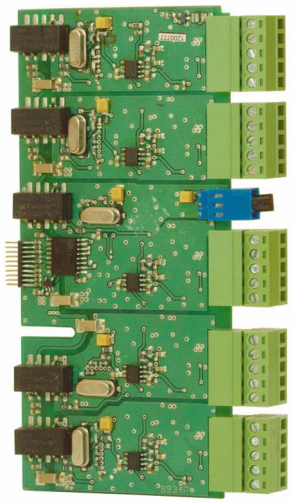
Input modules - universal

- UN3: 3 isolated universal inputs
- UN5: 5 isolated universal inputs

On customer's request, it is possible to install modules equipped with 3 or 5 universal inputs. Each module includes a sensor for cold junction compensation. It is one of the most advanced input modules, available for the MultiCon. With its help user can make many different kind of measurements in each channel. This module can measure: voltage, current, resistance, temperature using resistance sensors or thermocouples.



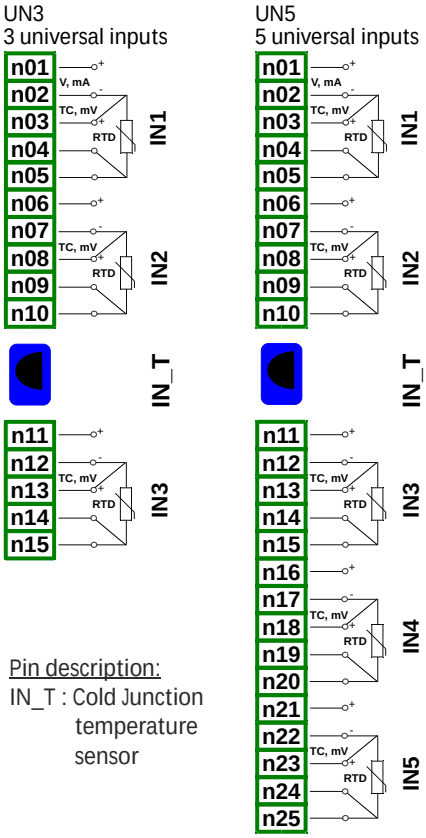
UN3



UN5

UN modules parameters are:
- Name - read-only input name given by the device,
- Unit - read-only field („°C”, „mA”, „V”, „Ohm” or „mV”), depending on Mode parameter settings,
- Mode - allows to set operation mode, eg. select a type of thermocouple or mV measurement range or other,
- Low limit - defines measurement level below which in logical channel „Lo” state will be displayed,
- High limit - defines measurement level above which in logical channel „Hi” state will be displayed,
- Wire compensation - menu which allows to compensate measurement errors, which can be caused by wrong sensor readings, options: compensation mode (allows to choose parameter which will be used in compensation process), disable (compensation is not active), manual (allows to compensate sensor constant offset),
- Actual temperature - parameter in which user enters actual temperature near the sensor, which is measured by more reliable thermometer.

MODULE PIN ASSIGNMENT



Pin description:
IN_T : Cold Junction temperature sensor

TECHNICAL DATA

	UN3	UN5
Number of inputs	3 (isolated)	5 (isolated)
Measurement ranges current inputs: voltage inputs: thermocouple inputs: RTD inputs: (2, 3, 4-wire) resistance input:	 0 ÷ 20 mA, 4 ÷ 20 mA 0 ÷ 5V, 1 ÷ 5V, 0 ÷ 10V, 2 ÷ 10V, -10 ÷ 25mV, -10 ÷ 100mV, 0 ÷ 600mV J, K, S, T, N, R, B, E (PN-EN), L (GOST) Pt100, Pt500, Pt1000 (PN-EN), Pt'50, Pt'100, Pt'500 (GOST), Ni100, Ni500, Ni1000 (PN-EN), Cu50, Cu100 (PN-83M-53852), Cu'50, Cu'100 (PN-83M-53852) 0-300 Ω, 0-3 kΩ	 0 ÷ 20 mA, 4 ÷ 20 mA 0 ÷ 5V, 1 ÷ 5V, 0 ÷ 10V, 2 ÷ 10V, -10 ÷ 25mV, -10 ÷ 100mV, 0 ÷ 600mV J, K, S, T, N, R, B, E (PN-EN), L (GOST) Pt100, Pt500, Pt1000 (PN-EN), Pt'50, Pt'100, Pt'500 (GOST), Ni100, Ni500, Ni1000 (PN-EN), Cu50, Cu100 (PN-83M-53852), Cu'50, Cu'100 (PN-83M-53852) 0-300 Ω, 0-3 kΩ
Sampling period	current, voltage, thermocouple inputs: 535 ms RTD, resistance inputs: 1410 ms	current, voltage, thermocouple inputs: 535 ms RTD, resistance inputs: 1410 ms
Precision	0,15% @ 25°C (for -10 ÷ 25 mV); 0,1% @ 25°C (others ranges)	0,15% @ 25°C (for -10 ÷ 25 mV); 0,1% @ 25°C (others ranges)
Input impedance	current inputs: <65 Ω (30 Ω typ.) voltage inputs: >100 kΩ (while maintaining correct polarization) TC inputs: >1,5 MΩ	current inputs: <65 Ω (30 Ω typ.) voltage inputs: >100 kΩ (while maintaining correct polarization) TC inputs: >1,5 MΩ
Weight	74 g	77 g
Part number	M99-UN3-001	M141-UN5-001