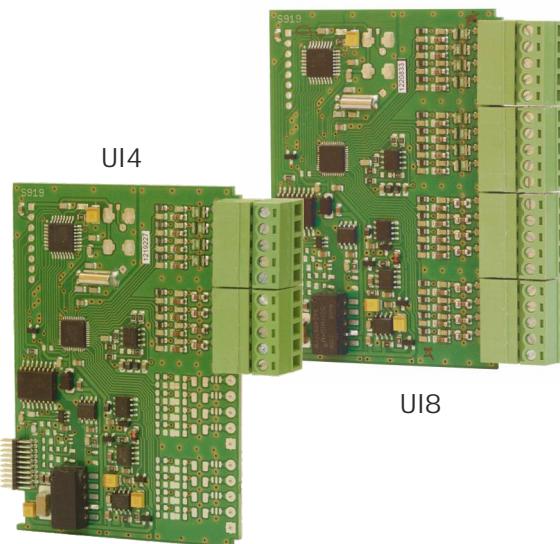


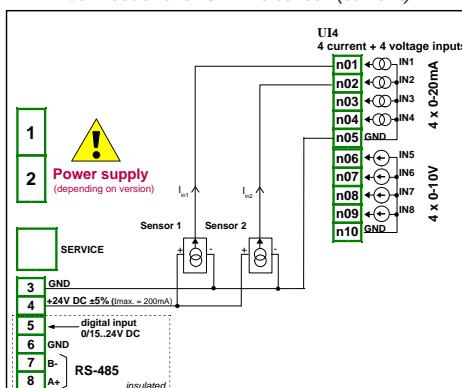
# MultiCon



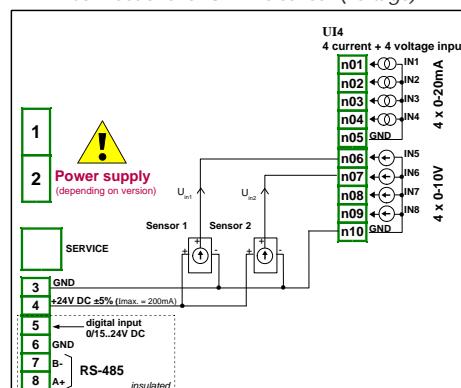
Voltage / current inputs parameters are:

- Name - read-only input name given by the device,
- Unit - read-only field which displays unit of measurement,
- Mode - defines measurement range,
- 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.

Connections for 3-wire sensor (current)



Connections for 3-wire sensor (voltage)



## Input modules - voltage/current

- UI4: 4 voltage + 4 current inputs
- UI8: 8 voltage + 8 current inputs
- UI12: 12 voltage + 12 current inputs

The MultiCon UI modules include 8, 16 or 24 voltage / current inputs, mixed where half of them are voltage and half are current.

To make sensor connection easier, inputs are grouped and all ground terminals are common but separated from power supply and other modules.

### MODULE PIN ASSIGNMENT

| UI4<br>4 voltage<br>+ 4 current inputs                                                                                                     | UI8<br>8 voltage<br>+ 8 current inputs | UI12<br>12 voltage<br>+ 12 current inputs |
|--------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------|
| n01 ←○○ IN1<br>n02 ←○○ IN2<br>n03 ←○○ IN3<br>n04 ←○○ IN4<br>n05 GND<br>n06 ←○○ IN5<br>n07 ←○○ IN6<br>n08 ←○○ IN7<br>n09 ←○○ IN8<br>n10 GND | 4 x 0-20mA<br>4 x 0-10V                | 4 x 0-20mA<br>4 x 0-10V                   |
| n11 ←○○ IN9<br>n12 ←○○ IN10<br>n13 ←○○ IN11<br>n14 ←○○ IN12<br>n15 GND                                                                     | 4 x 0-20mA<br>4 x 0-10V                | 4 x 0-20mA<br>4 x 0-10V                   |
| n16 ←○○ IN13<br>n17 ←○○ IN14<br>n18 ←○○ IN15<br>n19 ←○○ IN16<br>n20 GND                                                                    | 4 x 0-10V                              | 4 x 0-10V                                 |
| n21 ←○○ IN17<br>n22 ←○○ IN18<br>n23 ←○○ IN19<br>n24 ←○○ IN20<br>n25 GND                                                                    | 4 x 0-10V                              | 4 x 0-10V                                 |
| n26 ←○○ IN21<br>n27 ←○○ IN22<br>n28 ←○○ IN23<br>n29 ←○○ IN24<br>n30 GND                                                                    | 4 x 0-10V                              | 4 x 0-10V                                 |

### TECHNICAL DATA

|                     | UI4                                                                       | UI8                                                                       | UI12                                                                      |
|---------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Number of inputs    | 4 x voltage + 4 x current                                                 | 8 x voltage + 8 x current                                                 | 12 x voltage + 12 x current                                               |
| Measurement range   | voltage: 0 ÷ 5V, 1 ÷ 5V, 0 ÷ 10V, 2 ÷ 10V;<br>current: 0 ÷ 20mA, 4 ÷ 20mA | voltage: 0 ÷ 5V, 1 ÷ 5V, 0 ÷ 10V, 2 ÷ 10V;<br>current: 0 ÷ 20mA, 4 ÷ 20mA | voltage: 0 ÷ 5V, 1 ÷ 5V, 0 ÷ 10V, 2 ÷ 10V;<br>current: 0 ÷ 20mA, 4 ÷ 20mA |
| Hardware limitation | voltage: 0V ÷ 12V; current: 0mA ÷ 24 mA                                   | voltage: 0V ÷ 12V; current: 0mA ÷ 24 mA                                   | voltage: 0V ÷ 12V; current: 0mA ÷ 24 mA                                   |
| Hardware resolution | voltage: 1 mV; current: 1 µA                                              | voltage: 1 mV; current: 1 µA                                              | voltage: 1 mV; current: 1 µA                                              |
| Precision           | 0.1% @ 25°C                                                               | 0.1% @ 25°C                                                               | 0.1% @ 25°C                                                               |
| Internal impedance  | voltage: 50k ; current: type 100                                          | voltage: 50k ; current: type 100                                          | voltage: 50k ; current: type 100                                          |
| Protection          | voltage: no;<br>current: 50mA, auto-reset fuse                            | voltage: no;<br>current: 50mA, auto-reset fuse                            | voltage: no;<br>current: 50mA, auto-reset fuse                            |
| Sampling period     | 10ms, CMC reads modules every 100ms                                       | 10ms, CMC reads modules every 100ms                                       | 10ms, CMC reads modules every 100ms                                       |
| Weight              | 32g                                                                       | 43g                                                                       | 62g                                                                       |
| Part number         | M99-UI4-001                                                               | M99-UI8-001                                                               | M141-UI12-001                                                             |

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