

### Electrical specifications

Order information	
type	CMS-UI-2UI
cat.no	16121.2
Input data	
range (select via dipswitches)	0-5V/1-5V/0-10V/2-10V/0-10mA/2-10mA/0-20mA/4-20mA
max. input signal (U / I)	12V / 25mA
input resistance (U / I)	> 50 kOhm / 100 Ohm
Output data	
output signal (select via dipswitch)	0-5V/1-5V/0-10V/2-10V/0-10mA/2-10mA/0-20mA/4-20mA (and inverted out)
max. output signal (U / I)	< 10,5V / < 21mA
load resistance (U / I)	> 1k Ohm / < 600 Ohm
offset (U / I)	< 20mV / < 40uA
General data	
module power supply	24V DC $\pm$ 25%
module current	typical 65mA
conversion error	< 0,5% of end value
temperature coefficient	< 0,02 %/°C
max. conversion frequency	10Hz
CE marking	Low Voltage Directive (LVD) 2006/95/EC, according requirements of EN 61010 EMC Directive 2004/108/EC, according requirements of EN 55011 and EN 61326-1
isolation voltage input / power	500V DC
isolation voltage input / output	500V DC
isolation voltage output / power	500V DC
operating / storage temperature	0°C...+55°C / -20°C...+70°C
conductor cross section	0,2 - 2,5 mm <sup>2</sup>
connection system	screw clamp connection, pluggable
insulation stripping length	7 mm
mounting / installation position	DIN-rail TS35 / any
module size LxWxH (TS35)	17,5 x 99 x 114,5mm
weight	115 gr

### Manual



The CMS-UI-2UI is a multi-functional dual output 4-way isolated signal converter. This module is used for electrical isolation and conversion of analog signals. The 4-way isolation enables the module to be used locally as well as in the vicinity of the controlling system.

The inputs and outputs of the converter are configured by means of dipswitches.

Any combination of input and output can be chosen, so numerous different signal conversions can be set. Default input/output setting is 0..10V / 0..10V. Other default input/output settings on request.

#### Features:

- Multifunctional analog inputs (0..5V, 1..5V, 0..10V, 2..10V, 0..10mA, 2..10mA, 0..20mA, 4..20mA)
- Multifunctional analog outputs (0..5V, 1..5V, 0..10V, 2..10V, 0..10mA, 2..10mA, 0..20mA, 4..20mA). The output signal can be inverted.
- Analog signal range selectable via DIP switches
- Dual output 4-way galvanic isolation
- Power supply 24V DC
- Other analog signal ranges on request

**Configuration**

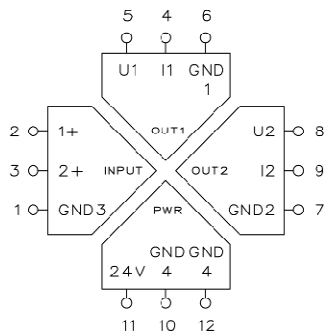
To open the module press the locking levers under the terminals with a screwdriver.



The module is configured by setting the dip-switches according to this manual and the table on the side of the module.

**Connecting the module**

The pin configuration for I/O and power connection is shown on the top of the module.



**Jumper / Dipswitch settings**

Voltage / Current Input selection via Jumpers



Voltage Input



Current Input

Function	1	2
DUAL INPUT	OFF	OFF
SPLITTER	OFF	ON
INVERTER	ON	OFF

DUAL INPUT	Input 1 & 2		Output 1		Output 2	
value	3	4	5	6	7	8
0..10V / 0..20mA	OFF	OFF	OFF	OFF	OFF	OFF
0..5V / 0..10mA	OFF	ON	OFF	ON	OFF	ON
2..10V / 4..20mA	ON	OFF	ON	OFF	ON	OFF
1..5V / 2..10mA	ON	ON	ON	ON	ON	ON

SPLITTER	Input 1		Output 1		Output 2	
value	3	4	5	6	7	8
0..10V / 0..20mA	OFF	OFF	OFF	OFF	OFF	OFF
0..5V / 0..10mA	OFF	ON	OFF	ON	OFF	ON
2..10V / 4..20mA	ON	OFF	ON	OFF	ON	OFF
1..5V / 2..10mA	ON	ON	ON	ON	ON	ON

INVERTER	Input 1	
value	3	4
0..10V / 0..20mA	OFF	OFF
0..5V / 0..10mA	OFF	ON
2..10V / 4..20mA	ON	OFF
1..5V / 2..10mA	ON	ON

	Output 1		Output 2	
value	5	6	7	8
10..0V / 20..0mA	OFF	OFF	OFF	OFF
5..0V / 10..0mA	OFF	ON	OFF	ON
10..2V / 20..4mA	ON	OFF	ON	OFF
5..1V / 10..2mA	ON	ON	ON	ON