

Electrical specifications

Order information	
type	CMS-UI-UI
cat.no	15650.2
Input data	
range (select via dipswitches)	0-1V/0-2V/0-2,5V/0-5V/1-5V/0-10V/0-20V/0-40V/0-5mA/0-10mA/0-20mA/4-20mA
max. input signal (U / I)	40V / 25mA
input resistance (U / I)	> 200 kOhm / 50 Ohm
Output data	
output signal (select via dipswitch)	0-5V / 1-5V / 0-10V / 0-5mA / 0-10mA / 0-20mA / 4-20mA (and inverted out)
max. output signal (U / I)	< 15V / < 30mA
load resistance (U / I)	> 1k Ohm / < 600 Ohm
offset (U / I)	< 10mV / < 20uA
General data	
module power supply	24V DC \pm 25%
module current	Approx. 50mA
conversion error	< 0,1%
linearity error	< 0,1%
temperature coefficient	< 0,01 %/°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	1kV, 50Hz, 1min.
isolation voltage input / output	1kV, 50Hz, 1min.
isolation voltage output / power	1kV, 50Hz, 1min.
operating / storage temperature	0°C...+55°C / -20°C...+70°C
conductor cross section	0,2 - 2,5 mm ²
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	120 gr

Manual



The CMS-UI-UI is a multi-functional 3-way isolated signal converter. This module is used for electrical isolation and conversion of analog signals. The 3-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 input (0..1V, 0..2V, 0..2,5V, 0..5V, 1..5V, 0..10V, 0..20V, 0..40V, 0..5mA, 0..10mA, 0..20mA, 4..20mA)
- Multifunctional analog output (0..5V, 1..5V, 0..10V, 0..5mA, 0..10mA, 0..20mA, 4..20mA). The output signal can be inverted with one dipswitch.
- Analog signal range selectable via DIP switches
- 3-Way galvanic isolation
- Power supply 24V DC
- Other analog signal ranges on request

Configuration



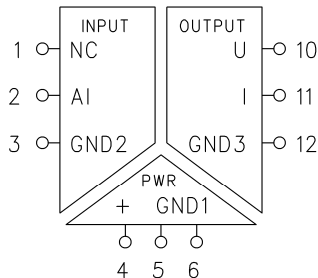
To open the module press the locking levers under the terminals with a screwdriver.

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.

Connection diagram



Dipswitch settings

Input range (V)	Dipswitch 1							
	1	2	3	4	5	6	7	8
0...1V	OFF	OFF	ON	ON	OFF	ON	OFF	X
0...2V	OFF	OFF	ON	OFF	ON	ON	OFF	X
0...2,5V	OFF	ON	OFF	ON	ON	ON	OFF	X
0...5V	OFF	ON	OFF	OFF	OFF	OFF	ON	X
1...5V	OFF	ON	OFF	ON	OFF	OFF	ON	X
0...10V	OFF	ON	OFF	OFF	ON	OFF	ON	X
0...20V	OFF	ON	OFF	ON	ON	OFF	ON	X
0...40V	OFF	ON	OFF	OFF	OFF	ON	ON	X
Input range (mA)	1	2	3	4	5	6	7	8
0...5mA	ON	OFF	ON	OFF	OFF	OFF	ON	X
0...10mA	ON	OFF	ON	OFF	ON	OFF	ON	X
0...20mA	ON	OFF	ON	ON	ON	OFF	ON	X
4...20mA	ON	OFF	ON	ON	OFF	ON	ON	X

Output range (V)	Dipswitch 2							
	1	2	3	4	5	6	7	8
0...10V	X	X	X	OFF	OFF	OFF	OFF	X
0...5V	X	X	X	ON	OFF	OFF	OFF	X
1...5V	X	X	X	OFF	ON	OFF	OFF	X
10...0V	X	X	X	OFF	OFF	OFF	ON	X
5...0V	X	X	X	ON	OFF	OFF	ON	X
5...1V	X	X	X	OFF	ON	OFF	ON	X
Output range (mA)	1	2	3	4	5	6	7	8
0...5mA	X	X	X	ON	ON	OFF	OFF	X
0...10mA	X	X	X	ON	OFF	ON	OFF	X
0...20mA	X	X	X	ON	ON	ON	OFF	X
4...20mA	X	X	X	OFF	ON	ON	OFF	X
5...0mA	X	X	X	ON	ON	OFF	ON	X
10...0mA	X	X	X	OFF	OFF	ON	ON	X
20...0mA	X	X	X	ON	OFF	ON	ON	X
20...4mA	X	X	X	OFF	ON	ON	ON	X

X = Don't Care