

multisio

2D2-4AI



Analog input module



KBR GmbH
Am Kieferschlag 7
D-91126 Schwabach

T +49 (0) 9122 6373-0
F +49 (0) 9122 6373-83
E info@kbr.de

www.kbr.de

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1 Functional description analog input module multio 2D2-4AI

The hardware of the multio 2D2-4AI supports 4 analog inputs and 5 LEDs .

With the 4 analog measuring inputs, currents of 0 to 20 mA and voltages of 0 to 10 V can be measured.

The 4 input LEDs indicate the states of the analog inputs, the power LED shows, whether or not operating voltage is supplied.

The module can be accessed by a master device (multio xD6 (from 5D6-ESBS-5DI6RO1DO) with module bus or via computer with VE via Multigate ES/BS) using the eBUS.

The master device has to configure the module and read out the data acquired by the module for further processing.

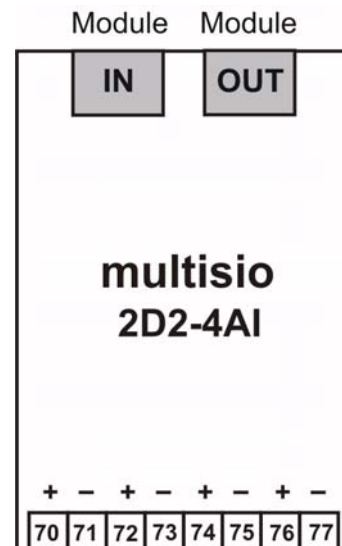
The operating voltage is supplied via the module bus interface. The module cannot be used as a stand-alone unit.

2 Analog input module connection chart

Terminal assignment

Terminal 70: analog input 1 +
Terminal 71: analog input 1 -
Terminal 72: analog input 2 +
Terminal 73: analog input 2 -
Terminal 74: analog input 3 +
Terminal 75: analog input 3 -
Terminal 76: analog input 4 +
Terminal 77: analog input 4 -

IN / OUT: Module bus / supply voltage



3 Analog input module LED display

In EBUS scanning mode, all 4 input LEDs are flashing.

In the module detection mode, the input LEDs generate a running light.

Assignment:

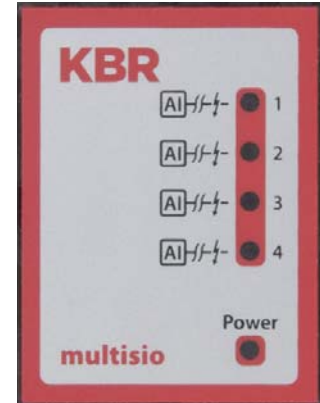
LED1 for input 1

LED2 for input 2

LED3 for input 3

LED4 for input 4

Power LED on: Operating voltage supplied



The LEDs at the 4-input analog module are illuminated if an analogous input signal is detected and the values are measured within the limits set. The LEDs are switched off if no analog encoder is connected or if the encoder is shorted out. When a limit is violated, the LEDs flash.



Note

When connected to the multisio xD6 (from 5D6-ESBS-5DI6RO1DO), the module always operates at 0-20mA / 0-10V, meaning the LEDs of the inputs 1 to 4 are constantly illuminated. The transformation 4-20mA / 2-10V is performed by the multisio xD6 device.

4 Function of scan button

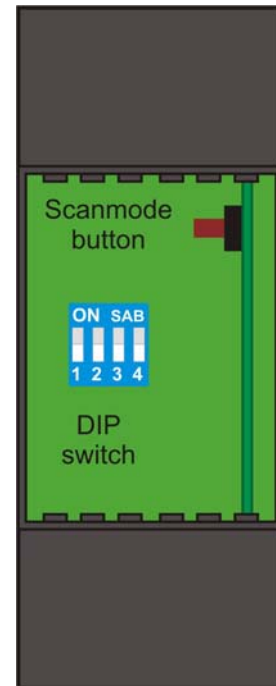


Note

If the scan button is pressed briefly, the module enters the scanning mode.

Switch setting illustrated:

OFF = white
ON = gray



5 Function of the DIP switches

Switching of inputs 1 to 4:

When switch is set to off:

S1 = 0 / 2 – 10V

S2 = 0 / 2 – 10V

S3 = 0 / 2 – 10V

S4 = 0 / 2 – 10V

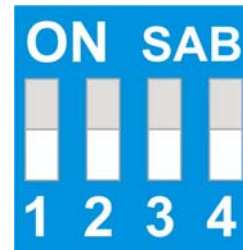
When switch is set to on:

S1 = 0 / 4 – 20mA

S2 = 0 / 4 – 20mA

S3 = 0 / 4 – 20mA

S4 = 0 / 4 – 20mA



Switch setting illustrated:

OFF = white
ON = gray

6 Technical data:

Power supply:	Via module bus	24VDC / ca. 1.3W
	Connection	Modular connector RJ12:6P6C
Hardware inputs:		
4 analog inputs:	Measuring range	0/4 - 20 mA, 0/2 – 10 V
	Plug terminal 8-pole	
Module bus interface:	Serial port	RS485
	Module bus connection	RJ12 for ready-made KBR system cable, max. length 30 m when placed accordingly
	Transfer rate	38400 Bps
	Bus protocol	KBR module bus
Display:	LED	4x messages 1x operation display
Control unit:	DIP switch	1x 4-input, programming of inputs
	Button	Scan button (module bus)
Mechanical data:		
Top hat rail device:	Housing dimensions	90 x 36 x 61 mm (H x W x D)
	Mounting type	Wall mounting on DIN rail, 7.5 mm deep, in accordance with DIN EN 50022. Suitable for distribution board mounting
	Weight	approx. 100g
Standards and miscellaneous:		
Environmental conditions:	Standards	DIN EN 60721-3-3/A2: 1997-07; 3K5+3Z11; (IEC721-3-3; 3K5+3Z11)
	Operating temperature	-5°C ... +55°C;
	Humidity	5% ... 95%, non-condensing
	Storage temperature	-25°C ... +70°C;
Electrical safety:	Standards	DIN EN 61010-1/A2: 2001 + B1: 2002-11 + B2: 2004-1; (IEC1010-1/A2)
	Protection type	IP20 in accordance with DIN EN 40050 part 9:1993-05
	Electromagnetic compatibility	DIN EN 61000-6-3: 2001 + A11: 2004; (IEC61000-6-3) DIN EN 61000-6-2: 2001 (IEC61000-6-2)

