

**multisio**

**2D2-4DI**



**Digital input  
module**



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## Table of Contents

1	Functional description digital input module multisiso 2D2-4DI .....	2
2	Digital input module connection chart .....	2
3	Digital input module LED display .....	3
4	Function of scan button .....	3
5	Function of the DIP switches .....	4
6	Technical data .....	5

## 1 Functional description digital input module multisisio 2D2-4DI

The hardware of the **multisisio 2D2-4DI** supports 4 analog inputs, 5 LEDs and a 8-way DIP switch.

If a switch connected to the digital input is closed, the module detects it as active.  
An open switch is detected as passive.

Pay attention to the right polarity when connecting electronic switches.

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

The **multisisio 2D2-4DI** manages the digital inputs using two selectable methods. Each input can be configured individually as a pulse counter input or state controlled input.

The module can be accessed by a master device (multisisio with module bus, multicom with module bus or via computer with VE via Multigate ES/BS) using the KBR 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 Digital input module connection chart

### Terminal assignment

- Terminal 50: digital input 1 +
- Terminal 51: digital input 1 -
- Terminal 52: digital input 2 +
- Terminal 53: digital input 2 -
- Terminal 54: digital input 3 +
- Terminal 55: digital input 3 -
- Terminal 56: digital input 4 +
- Terminal 57: digital input 4 -

IN / OUT: Module bus / supply voltage



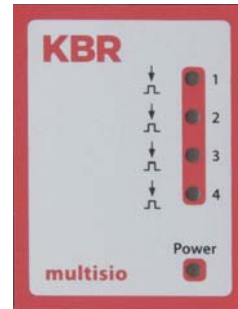
### 3 Digital input module LED display

In KBR eBUS scanning mode, all 4 input LEDs are flashing.  
 In the module detection mode, the input LEDs generate a running light.  
 A flashing LED shows that the respective digital input is set to manual operation.

**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 digital input module indicate the current state of the digital input.  
 If the input is active, the LED is lit. If the input is passive, the LED is off.

### 4 Function of scan button

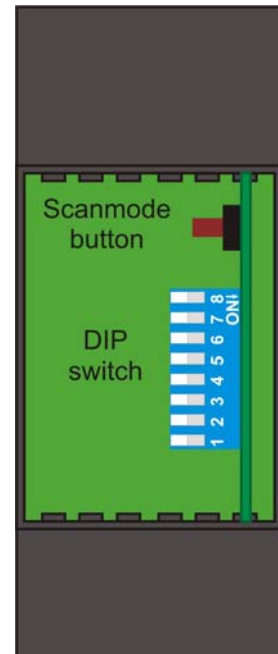


**Note**

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

Switch setting illustrated:

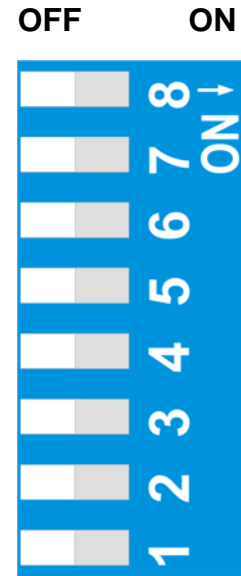
- OFF = white
- ON = gray



## 5 Function of the DIP switches

### Manual operation:

Each input can be individually set to manual operation. If the DIP switch of a channel is set to "OFF", the input state is accepted. If the DIP switch of a channel is set to "ON", the input state is set to active, irrespective of the actual input state.



DIP	OFF		ON			
S8	automatic		address		Input 4	
S7	automatic		address		Input 3	
S6	automatic		manual		Input 2	
S5	automatic		manual		Input 1	
S4	no function	OFF		ON		Input 4
		passive / off		active / on		
S3	no function	passive / off		active / on		Input 3
S2	no function	passive / off		active / on		Input 2
S1	no function	passive / off		active / on		Input 1

## 6 Technical data

<b>Power supply:</b>	Via module bus	24VDC / ca. 2W
	Connection	Modular connector RJ12:6P6C
<b>Hardware inputs:</b>		
4 digital inputs	S <sub>0</sub> - compatible	< 2 mA = off, > 10 mA = on
	Output voltage	< 24 VDC, pay attention to polarity
	Output current	<= 15 mA
	Plug terminal 8-pole	
<b>Module bus interface:</b>	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
<b>Display:</b>	LED	4x messages 1x operation display
Control unit	DIP switch	1x 8-input, programming of inputs
	Button	Scan button (module bus)
<b>Mechanical data:</b>		
Bus bar 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.
	Weight	approx. 70g
<b>Standards and miscellaneous:</b>		
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)

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