

**multisio**

**2D2-4TI**



**Temperature 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](mailto:info@kbr.de)

[www.kbr.de](http://www.kbr.de)

## Table of Contents

1	Function description temperature module multisiso 2D2-4TI .....	2
2	Temperature module - connection chart .....	2
3	Temperature module - LED display .....	3
4	Function of scan button .....	3
5	Function of the DIP switches .....	4
6	Technical data .....	5

## 1 Function description temperature module multisiso 2D2-4TI

The hardware of the **multisiso 2D2-4TI** supports 4 temperature inputs for PT1000 and 5 LEDs.

The module evaluates the measurement values of the temperature probe connected to the terminals 70 and 71.

The module can be accessed by a master device (multisiso xD6 (from 5D6-ESBS-5DI6RO1DO) with module bus or via computer with VE via Multigate ES/BS) using the the module bus interface. The master device has to configure the module and read out the data acquired by the module for further processing.

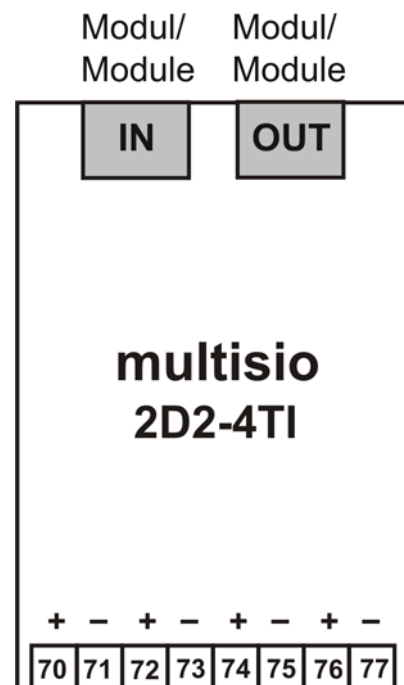
The operating voltage is supplied via the module bus interface. The module cannot be used as a stand-alone unit.

## 2 Temperature module - connection chart

### Terminal assignment

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

IN / OUT: Module bus / supply voltage



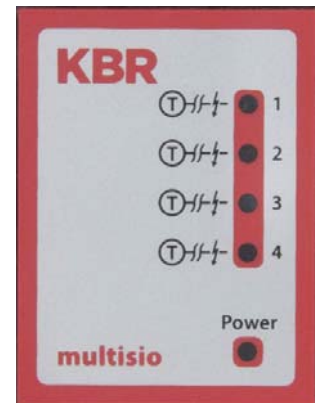
### 3 Temperature module - LED display

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: Operating voltage supplied



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

### 4 Function of scan button

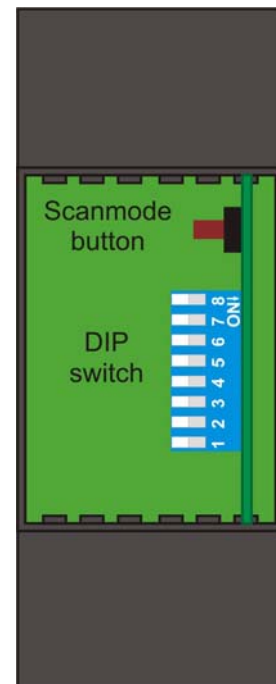


#### Note

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

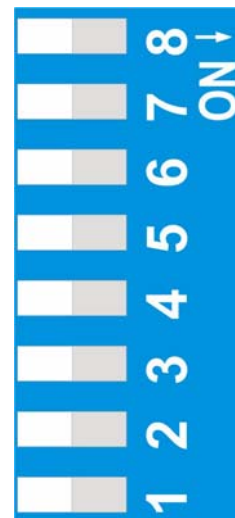
Switch setting illustrated:

OFF = white  
 ON = gray



## 5 Function of the DIP switches

- S8: OFF = no function, ON = line calibration with S4 is enabled
- S7: OFF = no function, ON = line calibration with S3 is enabled
- S6: OFF = no function, ON = line calibration with S2 is enabled
- S5: OFF = no function, ON = line calibration with S1 is enabled
- S4: OFF = no function, ON = no function  
switching from ON to OFF started the line calibration on input 4 when S8 is turned on
- S3: OFF = no function, ON = no function  
switching from ON to OFF started the line calibration on input 3 when S7 is turned on
- S2: OFF = no function, ON = no function  
switching from ON to OFF started the line calibration on input 2 when S6 is turned on
- S1: OFF = no function, ON = no function  
switching from ON to OFF started the line calibration on input 1 if S5 is turned on



### Caution!

When returning the DIP switches S1 to S4 from ON to OFF, the Loop of the corresponding input will be calibrated. For the calibration an adaptor is connected instead of the sensor (can be received from KBR).

## 6 Technical data

<b>Power supply:</b>	Via module bus	24VDC / < 1W
	Connection	Modular connector RJ12:6P6C
<b>Hardware inputs:</b>		
4 temperature inputs	Plug terminal 8-pole	for sensor PT-1000
	Type 1	-20°C to +80°C +/- 1%
	Type 2	-40°C to +40°C +/- 1%
<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-way, for wire calibration
	Button	Scan button (module bus)
<b>Mechanical data:</b>		
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.
	Weight	approx. 100g
<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)

