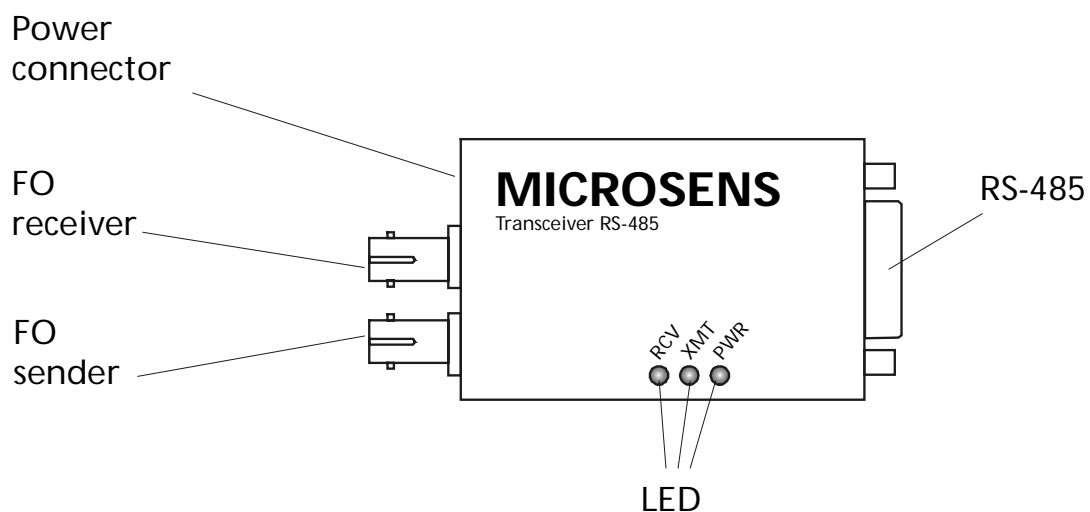


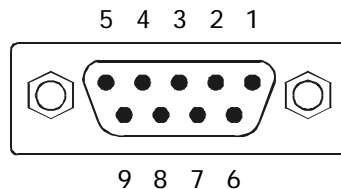
Technical Specifications

Type	Fiber Optic Miniature Transceiver for RS-485 halfduplex	
Fiber type	Multimode 62,5/125 μm or 50/125 μm duplex, with ST-connectors	
Wave length	850 nm	
Opt. power	45 μW /-13.5 dBm (typ)	
Opt. sensivity	2 μW 7-27 dBm (typ)	
Max. fiber length	2 km (62,5/125 μm)	
LED displays	<i>Power</i>	Power applied
	<i>Receive</i>	Data are transmitted via FO
	<i>Transmit</i>	Data are send via FO
Dynamic area	10,5dB (typ.)	
Supply unit	9 V DC 3 VA power supply jack	
Operating temperature	0°C to 55°C	
Storage temperature	-20°C to 80°C	
Rel. humidity	5% to 80% non condensing	
Dimensions	44 x 21 x 66 mm (w x h x d)	

Connectors

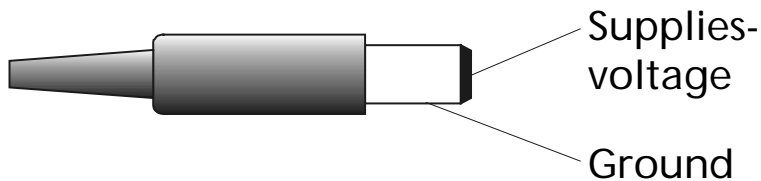
Pin Assignment

The SUB-D socket is used for the connection of the electrical interface RS-485. It has the following assignment:



Pin	Name	Description
3	RX+/TX+	send-/receive wire positiv
5	GND	ground
6	VCC	+5V
8	RX-/TX-	send-/receive wire negative

Pins 1,2,4,7 have no assignment. The termination of the cable must be done external.



Power supply: 9 V DC, max. 250 mA

Adjusting of tristate timing

As the RS-485 is working in full-duplex mode, the direction of the transceiver drivers has to be switched depending on data being received from either fibre or from the electrical side. Data from fibre is send directly to the electronical transceiver. If no data is being received from the fibre, the electronical transceiver has to be switched off, to enable another bus user to transfer his data.

The time constant (i.e until this switching has occurred) is different, depending on the use of bus protocoll and transmission rates. It must be smaller than the distance of a series of following datablocks and bigger as the max. length of a series of following 0 within a datablock. For athe adjustment of the time, the housing of the transceiver must be opened by losing the screws. Inside you will find a 6-pin switch to configurate the time constant.

Pin	Name	Description
1	t1	Time factor 1
2	t2	Time factor 2
3	t3	Time factor 3
4	t4	Time factor 4
5	res1	Only for test (always "off")
6	res2	Only for test (always "off")

The switch 1 to 4 are made to adjust of time constant. 16 different adjusting positions are possible:

t1	t2	t3	t4	time identification
on	on	on	on	5,6µs
*	on	on	on	100µs
on	*	on	on	200µs
*	*	on		300µs
on	on	*		400µs
*	on	*		500µs
on	*	*		600µs
*	*	*		700µs
on	on	on		800µs
*	on	on		900µs
on	*	on		1000µs
*	*	on		1100µs
on	on	*		1200µs
*	on	*		1300µs
on	*	*		1400µs
*	*	*		15000µs

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