



## TRANSMITTER PROFIBUS > RS 485

- GALVANIC SEPARATION: 2,5 kVAC
- POWER SUPPLY 10...30 V AC/DC; 80...250 V AC/DC

### OPERATION

The instrument is designed for transfer of communication among the OM xxx instruments to PROFIBUS bus without further control.

On the front panel of the transmitter there are 4 LED diodes for signalization of the operational status and communication in progress.

## OMX PROFIBUS

The transmitter is designed for easy and cost-effective connection of ORBIT MERRET™ instruments to PROFIBUS line with installation on DIN rail. One transmitter may control up to 31 instruments via the RS 485 line with communication protocol OM ASCII.

From the OM xxx instruments individual values may be downloaded from as many as 9 channels (for one instrument), as well as limit statuses may be set. Another option is projecting values and texts on displays of individual instruments.

**OMX PROFIBUS**  
PROFIBUS DP/RS 485

## TECHNICAL DATA

### INTERFACE PROFIBUS

<b>PB</b>	<b>Input</b>	EIA RS-485
	<b>Protocol</b>	PROFIBUS DP
	<b>Rate</b>	9,6 kBaud...12 MBaud
	<b>Address</b>	0...126, adjustable in DM instrum. with address „00
	<b>Data transfer</b>	54B to DM, 44B from DM
	<b>Modes</b>	- reading values + setting limits - value display FLOAT (Real)/LONG - text display - sending DM ASCII instructions
	<b>Number particip.</b>	< 32
	<b>Transfer state</b>	< 126 using a repeater
	<b>Transfer state</b>	4x signal LED

### INTERFACE RS 485

<b>RS</b>	<b>Input</b>	RS 485
	<b>Protocol</b>	DM ASCII - modified company protocol for connecting DM instruments
	<b>Format</b>	8 bit + no parity + 1 stop bit
	<b>Rate</b>	600...116 200 Baud
	<b>Number DM instr.</b>	< 32
	<b>Commun. rate</b>	0,1...17 s + communication time accord. to rate (def. 0,6 s)

### CONNECTION

<b>Cable</b>	<b>Type</b>	shielded twisted double-line
	<b>Resist.</b>	characteristic resistance 135...165 Ω
	<b>Capacity</b>	< 30 pF/m
	<b>Section</b>	> 0,32 mm <sup>2</sup>
	<b>Length</b>	1 200 m at baud rate 9,6 / 19,2 / 93,75 kBit/s 1 000 m at baud rate 187,5 kBit/s 400 m at baud rate 500 kBit/s 200 m at baud rate 1 500 kBit/s 100 m at baud rate 3 000/6 000/12 000 kBit/s
		Moving line is allowed up to transmission rate of max. 1 500 kBit/s, for increased security a transmission rate greater than 500 kBit/s should not be used.

### POWER SUPPLY

**Range:** 10...30 V AC/DC, ±10 %, PF ≥ 0,4, I<sub>STP</sub> < 40 A/1 ms, isolated  
80...250 V AC/DC, ±10 %, PF ≥ 0,4, I<sub>STP</sub> < 40 A/1 ms, isolated  
**Consumption:** < 1,5 W/1,5 VA

### MECHANIC PROPERTIES

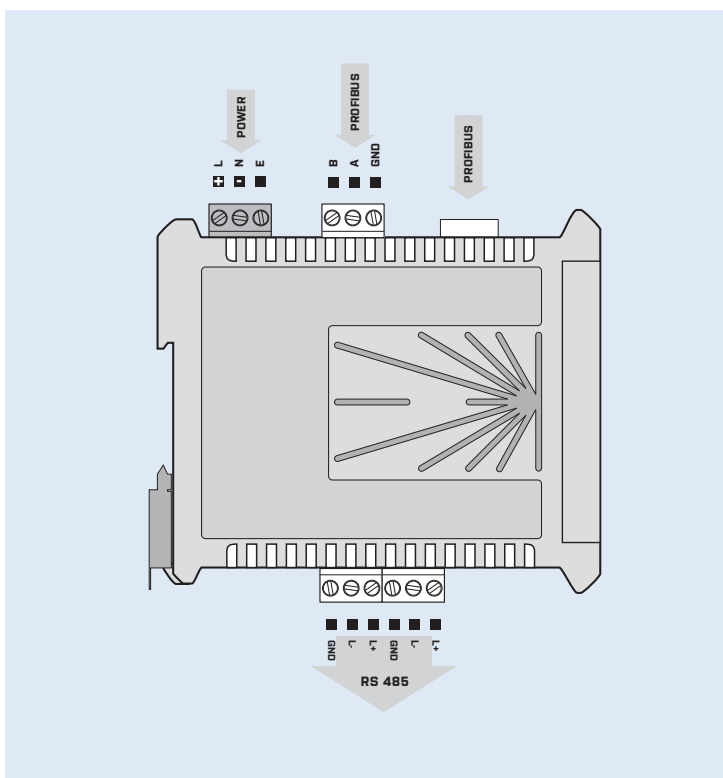
**Material:** PA 66, incombustible UL 94 V-1, blue  
**Dimensions:** 22 x 98 x 113 (w x h x d)  
**Installation:** on DIN rail, width 35 mm

### OPERATING CONDITIONS

**Connection:** connector terminal blocks, section < 2,5 mm<sup>2</sup>, 9-pin SUB-D (Canon)  
shielded twisted double-line with charact. resistance 135...165 Ω  
**Stabilization period:** within 5 minutes after switch on  
**Working temperature:** -20°...60°C  
**Storage temperature:** -20°...85°C  
**Protection:** IP20  
**El. safety:** EN 61010-1, A2  
**Dielectric strength:** 4 kVAC per 1 min test between supply and input  
**Insulation resistance:** for pollution degree II, measuring cat. III  
power supply > 600 V (PI), 300 V (DI)  
input, output, PN > 500 V (PI), 150 V (DI)  
**EMC:** EN 61326-1

PI - Primary insulation, DI - Double insulation

## CONNECTION



## ORDER CODE

### OMX Profibus

<b>Power supply</b>	10...30 V AC/DC, isolated*	<b>0</b>
	80...250 V AC/DC, isolated	<b>1</b>

Basic configuration of the instrument is indicated in bold.