

Product type designation

PROFIBUS OB1

PROFIBUS OB1 OPT. BUS TERMINAL FOR CONNECT. A PROFIBUS CLIENT WITHOUT INTEGRATED OPT. INTERFACE TO OPTICAL PROFIBUS DP, WITHOUT SIMPLEX CONNECTOR



Transmission rate

Transfer rate / with PROFIBUS	9.6 kbit/s ... 12 Mbit/s
Transfer rate / with PROFIBUS PA	45.45 kbit/s

Interfaces

Number of electrical/optical connections / for network components or terminal equipment / maximum	3
Number of electrical connections	
• for network components or terminal equipment	1
• for power supply	1
Type of electrical connection	
• for network components or terminal equipment	9-pin Sub-D socket
• for power supply	3-pole terminal block
• for power supply and signaling contact	-
Number of optical interfaces / for fiber optic cable	2
Design of the optical interface / for fiber optic cable	Duplex port

Optical data

Damping ratio / of the FOC transmission link	
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<ul style="list-style-type: none"> • for PCF FOC with 200/230 μm / at 10 dB/km 	3 dB
<ul style="list-style-type: none"> • for POF FOC with 980/1000 μm / at 230 dB/km 	13 dB
propagation delay [bit]	6.5 bit
Connectable optical power relative to 1 mW	
<ul style="list-style-type: none"> • of the FOC transmission link / for PCF FOC with 200/230 μm / at 10 dB/km 	-16 dB
<ul style="list-style-type: none"> • of the FOC transmission link / for POF FOC with 980/1000 μm / at 230 dB/km 	-5.9 dB
Optical sensitivity relating to 1 mW	
<ul style="list-style-type: none"> • of the FOC transmission link / for PCF FOC with 200/230 μm / at 10 dB/km 	-22 dB
<ul style="list-style-type: none"> • of the FOC transmission link / for POF FOC with 980/1000 μm / at 230 dB/km 	-20 dB
Wavelength	
<ul style="list-style-type: none"> • of the FOC transmission link / for PCF FOC with 200/230 μm / at 10 dB/km 	660 nm
<ul style="list-style-type: none"> • of the FOC transmission link / for POF FOC with 980/1000 μm / at 230 dB/km 	660 nm
Wire length	
<ul style="list-style-type: none"> • for PCF FOC with 200/230 μm / at 10 dB/km / maximum 	300 m
<ul style="list-style-type: none"> • for POF FOC with 980/1000 μm / at 230 dB/km / maximum 	50 m

Supply voltage, current consumption, power loss

Type of voltage / of the supply voltage	DC
Supply voltage / at DC / Rated value	24 V
Supply voltage / at DC	19.2 ... 28.8 V

Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation 	0 ... 60 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +70 °C
<ul style="list-style-type: none"> • during transport 	-40 ... +70 °C
Relative humidity / at 25 °C / without condensation / during operation / maximum	95 %
Protection class IP	IP30

Design, dimensions and weight

Design	compact
Width	50.5 mm
Height	138 mm
Depth	78 mm
Net weight	400 g
Mounting type	
<ul style="list-style-type: none"> • 35 mm DIN rail mounting 	Yes

- wall mounting

Yes

Product functions / Redundancy

Product function / Ring redundancy

No

Standards, specifications, approvals

Standard	
<ul style="list-style-type: none"> • for FM 	FM3611: Class 1, Division 2, Group A, B, C, D / T4, Class 1, Zone 2, Group IIC, T4
<ul style="list-style-type: none"> • for hazardous zone 	EN 60079-0: 2006, EN60079-15: 2005, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X
<ul style="list-style-type: none"> • for safety / from CSA and UL 	UL 60950-1, CSA C22.2 Nr. 60950-1
<ul style="list-style-type: none"> • for hazardous zone / from CSA and UL 	-
<ul style="list-style-type: none"> • for emitted interference 	EN 61000-6-4 (Class A)
<ul style="list-style-type: none"> • for interference immunity 	EN 61000-6-2
Certificate of suitability	EN 61000-6-2, EN 61000-6-4
<ul style="list-style-type: none"> • CE marking 	Yes
<ul style="list-style-type: none"> • C-Tick 	Yes
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) 	No
<ul style="list-style-type: none"> • Bureau Veritas (BV) 	No
<ul style="list-style-type: none"> • Det Norske Veritas (DNV) 	No
<ul style="list-style-type: none"> • Germanische Lloyd (GL) 	No
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	No
<ul style="list-style-type: none"> • Nippon Kaiji Kyokai (NK) 	No

Further Information / Internet Links

Internet-Link	
<ul style="list-style-type: none"> • to website: Selector SIMATIC NET SELECTION TOOL 	http://www.siemens.com/snst
<ul style="list-style-type: none"> • to website: Industrial communication 	http://www.siemens.com/simatic-net
<ul style="list-style-type: none"> • to website: Industry Mall 	https://mall.industry.siemens.com
<ul style="list-style-type: none"> • to website: Information and Download Center 	http://www.siemens.com/industry/infocenter
<ul style="list-style-type: none"> • to website: Image database 	http://automation.siemens.com/bilddb
<ul style="list-style-type: none"> • to website: CAx Download Manager 	http://www.siemens.com/cax
<ul style="list-style-type: none"> • to website: Industry Online Support 	https://support.industry.siemens.com

Security information

Security information

Siemens provides products and solutions with industrial security functions that support the secure operation of plants, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates. For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit <http://www.siemens.com/industrialsecurity>. To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <http://support.automation.siemens.com>. (V3.4)

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