

Product type designation (product description)

MM991-2FM

XR-300 media module

SCALANCE X accessory; Media module MM991-2FM; 2x 100 Mbit/s

BFOC ports, optical; multimode optical up to max. 5 km



Interfaces

Number of electrical/optical connections / for network components or terminal equipment / maximum	2
Number of optical interfaces / for network components or terminal equipment / maximum	2
Number of 100 Mbit/s ST(BFOC) ports / for multimode / Integrated	2
Design of the optical interface / for network components or terminal equipment	ST/BFOC
Wavelength / of the optical interface	1310 nm; Multi-mode
Connectable optical power relative to 1 mW • of the transmitter output / minimum • of the transmitter output / maximum • of the receiver input / maximum	-19 dB -14 dB -3 dB
Optical sensitivity relating to 1 mW / of the receiver input / minimum	-32 dB
Damping ratio / of the FOC transmission link / minimum necessary	0 dB

Range / at the optical interface / depending on the optical fiber used	0 ... 5 km
Permitted ambient conditions	
Ambient temperature	
• during operation	-40 ... +70 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
Relative humidity / at 25 °C / without condensation / during operation / maximum	95 %
Protection class IP	IP20
Design, dimensions and weight	
Design	Media module
Width	60 mm
(height)	22 mm
Depth	100 mm
(net weight)	0.08 kg
• (mounting type)	latched
• Mounting type / Installation in media module slot	Yes
Standards, specifications, approvals	
Standard	
• for FM	FM3611: Class 1, Division 2, Group A, B, C, D / T4, Class 1, Zone 2, Group IIC, T4
• for hazardous zone	EN 60079-0: 2006, EN60079-15: 2005, II 3(2) G Ex nA [op is] IIC T4 DEKRA 11 ATEX 0060 X
• for safety / from CSA and UL	UL 60950-1, CSA C22.2 No. 60950-1
• for hazardous zone / from CSA and UL	UL 1604 and UL 2279-15 (Hazardous Location), CSA C22.2 No. 213-M1987, Class 1 / Division 2 / Group A, B, C, D / T4, Class 1 / Zone 2 / Group IIC / T4
• for emitted interference	EN 61000-6-4:2007 (Class A)
• for interference immunity	EN 61000-6-2:2005
• (certificate of suitability)	EN 61000-6-2:2005, EN 61000-6-4:2007
• Certificate of suitability / CE marking	Yes
• Certificate of suitability / C-Tick	Yes
• Certificate of suitability / KC approval	Yes
Marine classification association	
• Bureau Veritas (BV)	Yes
MTBF	135 y
Further Information / Internet Links	
Internet-Link	
• to website: Selector SIMATIC NET SELECTION TOOL	http://www.siemens.com/snst

- to website: Industrial communication
- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<http://www.siemens.com/simatic-net>

<https://mall.industry.siemens.com>

<http://www.siemens.com/industry/infocenter>

<http://automation.siemens.com/bilddb>

<http://www.siemens.com/cax>

<https://support.industry.siemens.com>

last modified:

04/13/2019