

### product type designation

product description

**MM991-2LH+**

XR-300 media module

SCALANCE X accessory, Media module MM991-2LH+, 2x 100 Mbit/s SC ports optical; single-mode optical up to max. 70 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 SC ports / for multimode / integrated	2
design of the optical interface / for network components or terminal equipment	SC
wavelength / of the optical interface	1550 nm; Single-mode
connectable optical power relative to 1 mW <ul style="list-style-type: none"> <li>of the transmitter output / minimum</li> <li>of the transmitter output / maximum</li> <li>of the receiver input / maximum</li> </ul>	-5 dB 0 dB -3 dB
optical sensitivity relating to 1 mW / of the receiver input / minimum	-34 dB
attenuation factor / of the FOC transmission link / minimum necessary	3 dB
range / at the optical interface / depending on the optical fiber used	12 ... 70 km
ambient conditions	
ambient temperature <ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> <li>during transport</li> </ul>	-40 ... +60 °C -40 ... +85 °C -40 ... +85 °C
relative humidity / at 25 °C / without condensation / during operation / maximum	95 %
protection class IP	IP20
design, dimensions and weights	
design	Media module
width	60 mm
height	22 mm
depth	100 mm
net weight	0.08 kg
fastening method <ul style="list-style-type: none"> <li>installation in media module slot</li> </ul>	latched Yes
standards, specifications, approvals	
standard	

<ul style="list-style-type: none"> <li>• for FM</li> <li>• for hazardous zone</li> <li>• for safety / from CSA and UL</li> <li>• for hazardous zone / from CSA and UL</li> </ul>	FM3611: Class 1, Divison 2, Group A, B, C, D / T4, Class 1, Zone 2, Group IIC, T4 EN 60079-0: 2006, EN60079-15: 2005, II 3 G Ex nA II T4, KEMA 07 ATEX 0145 X UL 60950-1, CSA C22.2 No. 60950-1
<ul style="list-style-type: none"> <li>• for emitted interference</li> <li>• for interference immunity</li> </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 EN 61000-6-4:2007 (Class A) EN 61000-6-2:2005
certificate of suitability <ul style="list-style-type: none"> <li>• CE marking</li> <li>• C-Tick</li> <li>• KC approval</li> </ul>	EN 61000-6-2:2005, EN 61000-6-4:2007 Yes Yes Yes
Marine classification association <ul style="list-style-type: none"> <li>• French marine classification society (BV)</li> </ul>	Yes
MTBF	105 y
<b>further information / internet-Links</b>	
Internet-Link <ul style="list-style-type: none"> <li>• to website: Industrial communication</li> <li>• to website: Industry Mall</li> <li>• to website: Information and Download Center</li> <li>• to website: Image database</li> <li>• to website: CAx-Download-Manager</li> <li>• to website: Industry Online Support</li> </ul>	<a href="http://www.siemens.com/simatic-net">http://www.siemens.com/simatic-net</a> <a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a> <a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a> <a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a> <a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a> <a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
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