

product type designation



SFP991-1LD

SCALANCE X accessory; SFP991-1LD; 1x 100 Mbit/s LC port, optical; single-mode optical up to max. 26 km.

product brand name

SCALANCE

Technical Product Detail Page

<https://l.siemens.com/1P6GK5991-1AF00-8AA0>

interfaces

number of electrical/optical connections / for network components or terminal equipment / maximum	1
number of optical interfaces / for network components or terminal equipment / maximum	1
number of 100 Mbit/s LC ports	1
design of the optical interface / for network components or terminal equipment	LC
wavelength / of the optical interface	1310 nm; Single-mode
connectable optical power relative to 1 mW • of the transmitter output / minimum • of the transmitter output / maximum • of the receiver input / maximum	-15 dB -8 dB -8 dB
optical sensitivity relating to 1 mW / of the receiver input / minimum	-28 dB
attenuation factor / of the FOC transmission link / minimum necessary	0 dB
range / at the optical interface / depending on the optical fiber used	0 ... 26 km
transmission method / for connection type 1	100BASE-LX

ambient conditions

ambient temperature • during operation • during storage • during transport • note	-40 ... +85 °C -40 ... +85 °C -40 ... +85 °C A maximum operating temperature of +85 °C is permissible for a duration of 16 hours
relative humidity / at 25 °C / without condensation / during operation / maximum	95 %
protection class IP	IP20

design, dimensions and weights

design	SFP Module
width	14 mm
height	9 mm
depth	57 mm
net weight	0.01 kg
fastening method	latched

standards, specifications, approvals

standard	
• for FM • for hazardous zone • for safety / from CSA and UL • for emitted interference • for interference immunity	FM3611: Class 1, Division 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 62368-1 and CAN/CSA C22.2 No. 62368-1:19 EN 61000-6-4:2007 (Class A) EN 61000-6-2:2005
certificate of suitability	EN 61000-6-2:2005, EN 61000-6-4:2007
• CE marking • C-Tick • KC approval • CCC / for hazardous zone according to GB standard • CCC / for hazardous zone according to GB standard / as marking	Yes Yes No Yes; GB3836.1, GB3836.8 Ex nA IIC T4 Gc
Marine classification association	
• French marine classification society (BV)	Yes
MTBF	490 a

standards, specifications, approvals / Environmental Product Declaration

Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
• total • during manufacturing • during operation • after end of life	12.91 kg 1.7 kg 11.2 kg 0.01 kg

further information / internet links

internet link	
• to website: Selection guide for cables and connectors • to web page: selection aid TIA Selection Tool • to website: Industrial communication • to web page: SiePortal • to website: Image database • to website: CAX-Download-Manager • to website: Industry Online Support	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://www.siemens.com/simatic-net https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb https://www.siemens.com/cax https://support.industry.siemens.com

security information

security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement - and continuously maintain - a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)
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Approvals / Certificates

General Product Approval

[Declaration of Conformity](#)



[China RoHS](#)

General Product Approval

For use in hazardous locations

[Manufacturer Declaration](#)



[China RoHS](#)



For use in hazardous locations

Maritime application

[FM](#)

[CCC-Ex](#)



Maritime application

Environment

[NK / Nippon Kaiji Kyokai](#)



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