

Product type designation



SCALANCE W786-2 SFP

IWLAN Access Point, SCALANCE W786-2 SFP, 2 radios, 6 R-SMA antenna port, iFeatures support via key plug, IEEE 802.11a/b/g/h/n, 2.4/5GHz, gross 450 Mbit/s per radio, 2x SFP 1 Gbit/s switches, redundant 24 V DC, terminal block, 110 - 230 V AC via PS791-2AC IP65, -40..+60 °C, plug slot, Temperature range dependent on SFP WPA2/802.11i/e, observe national approvals! CERT ID: EAPN-W2-SFP-E3 includes: MPCIE-R1-ABGN-U3, scope of delivery: Manuals on CD-ROM, German/English, for operation outside of USA/Israel

Transmission rate

Transfer rate	
<ul style="list-style-type: none"> with WLAN / maximum for Industrial Ethernet 	<p>450 Mbit/s</p> <p>1000 Mbit/s</p>
Transfer rate / for Industrial Ethernet	
<ul style="list-style-type: none"> minimum maximum 	<p>1000 Mbit/s</p> <p>1000 Mbit/s</p>

Interfaces

Number of electrical connections	
<ul style="list-style-type: none"> for power supply for redundant voltage supply 	<p>1</p> <p>0</p>
Type of electrical connection	
<ul style="list-style-type: none"> for power supply 	2-pole connector (24 V DC) or optionally available power supply adapter (4-pole 24 V DC or 3-pole 110 to 230 V AC)
Number of optical interfaces	
<ul style="list-style-type: none"> for fiber optic cable / at 1000 Mbit/s 	2
Design of the optical interface	
<ul style="list-style-type: none"> for fiber optic cable / at 1000 Mbit/s 	SFP slot

design of the removable storage	
<ul style="list-style-type: none"> • C-PLUG 	Yes
<ul style="list-style-type: none"> • KEY-PLUG 	Yes

Interfaces / wireless

Number of radio cards / permanently installed	2
Transmission mode / for multiple input multiple output (MIMO)	3x3
Number of spatial streams	3
Number of electrical connections / for external antenna(s)	6
Type of electrical connection / for external antenna(s)	R-SMA (socket)
Product feature / external antenna can be mounted directly on device	No

Supply voltage, current consumption, power loss

Type of voltage / of the supply voltage	DC
Supply voltage / 1	
<ul style="list-style-type: none"> • from terminal block 	19.2 V
Supply voltage / 2	
<ul style="list-style-type: none"> • from terminal block 	28.8 V
Supply voltage	
<ul style="list-style-type: none"> • from optional integrable power supply 	
<ul style="list-style-type: none"> — at AC 	100 ... 240 V
<ul style="list-style-type: none"> — at DC 	12 ... 24 V

Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation 	-40 ... +60 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +85 °C
<ul style="list-style-type: none"> • during transport 	-40 ... +70 °C
Relative humidity / at 25 °C / without condensation / during operation / maximum	100 %
Ambient condition / for operation	When using the power supply 100 to 240 V AC, an operating temperature of -40 °C to +60 °C is permissible
Protection class IP	IP65

Design, dimensions and weight

Width / of the enclosure / without antenna	251 mm
Height / of the enclosure / without antenna	251 mm
Depth / of the enclosure / without antenna	72 mm
Net weight	2.24 kg
Mounting type	For mast mounting, 35 mm DIN rail mounting and S7-300 rail mounting, an additional support plate is required
<ul style="list-style-type: none"> • S7-300 rail mounting 	Yes
<ul style="list-style-type: none"> • S7-1500 rail mounting 	No

- 35 mm DIN rail mounting
- wall mounting

Yes
Yes

Wireless frequencies

Operating frequency

- for WLAN in 2.4 GHz frequency band
- for WLAN in 5 GHz frequency band

2.41 ... 2.48 GHz
4.9 ... 5.8 GHz

Product properties, functions, components / general

Product function / Access Point Mode

Yes

Product function / Client Mode

Yes

Number of SSIDs

16

Product function

- iPCF Access Point
- iPCF client
- iPCF-MC Access Point
- iPCF-MC client

Yes; Only in combination with the 'KEY-PLUG W780 iFeatures'
Yes; Only in combination with the 'KEY-PLUG W780 iFeatures' or 'KEY-PLUG W740 iFeatures'
Yes; Only in combination with the 'KEY-PLUG W780 iFeatures'
Yes; Only in combination with 'KEY-PLUG W780 iFeatures' or 'KEY-PLUG W740 iFeatures'

Number of iPCF-capable radio modules

2

Product function / iREF

Yes; In combination only with 'KEY-PLUG W780 iFeatures'

Number of iREF-capable radio modules

2

Product function / iPRP

Yes; In combination with the 'KEY-PLUG W780 iFeatures' only

Product functions / management, configuration

Number of manageable IP addresses / in client

8

Product function

- CLI
- web-based management
- MIB support
- TRAPs via email
- Configuration with STEP 7
- configuration with STEP 7 in the TIA Portal
- operation with IWLAN controller
- operation with Enterasys WLAN controller
- forced roaming on IP down with IWLAN
- forced roaming on link down with IWLAN
- WDS

Yes
Yes
Yes
Yes
Yes
Yes
No
No
Yes
Yes
Yes

Protocol / is supported

- Address Resolution Protocol (ARP)
- ICMP
- Telnet
- HTTP
- HTTPS

Yes
Yes
Yes
Yes
Yes

• TFTP	Yes
• DCP	Yes
• LLDP	Yes
Identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 – higher-level designation/location designation	Yes

Product functions / Diagnosis

Product function	
• PROFINET IO diagnosis	Yes
• Link Check	No
• connection monitoring IP-Alive	No
• localization via Aeroscout	Yes
• SysLog	Yes
Protocol / is supported	
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes

Product functions / VLAN

Product function	
• function VLAN with IWLAN	Yes

Product functions / DHCP

Product function	
• DHCP client	Yes
• in Client Mode / DHCP server via LAN	Yes
• DHCP Option 82	Yes

Product functions / Redundancy

Protocol / is supported	
• STP/RSTP	Yes
• MSTP	Yes
• RSTP	Yes

Product functions / Security

Product function	
• ACL - MAC-based	Yes
• Management security, ACL-IP based	Yes
• IEEE 802.1x (radius)	Yes
• NAT/NAPT	No
• access protection according to IEEE802.11i	Yes
• WPA/WPA2	Yes
• TKIP/AES	Yes

Protocol / is supported	
• SSH	Yes
• RADIUS	Yes
Product functions / Time	
Protocol / is supported	
• NTP	Yes
• SNTP	Yes
• SIMATIC Time	Yes
Standards, specifications, approvals	
Standard	
• for FM	FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4
• for hazardous zone	EN 60079-15:2005, EN 60079-0:2006, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X
• for safety / from CSA and UL	UL 60950-1 CSA C22.2 No. 60950-1
• for hazardous zone / from CSA and UL	ANSI/ISA 12.12.01-2013, CAN/CSA C22.2 No.213-M1987, CL. 1, Div. 2, GP. A,B,C,D, T4 / CL. 1, Zone 2, GP IIC
Certificate of suitability	
• EC declaration of conformity	Yes
• CE marking	Yes
• C-Tick	Yes
• E1 approval	Yes
• Railway application in accordance with EN 50155	No
• Railway application in accordance with EN 50121-4	Yes
• NEMA TS2	No
• IEC 61375	No
• IEC 61850-3	No
• NEMA4X	Yes
• Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af	No
• Power-over-Ethernet according to IEEE802.3at for type 2	No
Standard for wireless communication	
• IEEE 802.11a	Yes
• IEEE 802.11b	Yes
• IEEE 802.11e	Yes
• IEEE 802.11g	Yes
• IEEE 802.11h	Yes
• IEEE 802.11i	Yes
• IEEE 802.11n	Yes

Wireless approval	You will find the current list of countries at: www.siemens.de/funkzulassungen
Marine classification association	
<ul style="list-style-type: none"> American Bureau of Shipping Europe Ltd. (ABS) Bureau Veritas (BV) DNV GL Lloyds Register of Shipping (LRS) Nippon Kaiji Kyokai (NK) Polski Rejestr Statkow (PRS) Royal Institution of Naval Architects (RINA) 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

Accessories

accessories	24 V DC screw terminal included in scope of delivery
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Further Information / Internet Links

Internet-Link	
<ul style="list-style-type: none"> to website: TIA Selection Tool to the website: IWLAN to website: Industry Mall to website: Information and Download Center to website: Image database to website: CAx Download Manager to website: Industry Online Support 	<p>http://www.siemens.com/tia-selection-tool</p> <p>http://www.siemens.com/iwlan</p> <p>https://mall.industry.siemens.com</p> <p>http://www.siemens.com/industry/infocenter</p> <p>http://automation.siemens.com/bilddb</p> <p>http://www.siemens.com/cax</p> <p>https://support.industry.siemens.com</p>

Security information

Security information	<p>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)</p>
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