

product type designation



W786-1 RJ45 (USA)

product announced for discontinuation; IWLAN access point, SCALANCE W786-1 RJ45, 1 radio, 3 R-SMA- antenna port, iFeatures support via KEY-PLUG, IEEE 802.11a/b/g/h/n, 2.4/5 GHz, gross 450 Mbps per radio, 1x RJ45 max. 1 Gbps, PoE, redundant 24 V DC, joint block, 110 - 230 V AC via PS791-2AC IP65, -40...+60 °C, plug slot, WPA2/802.11i/e, observe national approvals! CERT ID: EAPN-W1-RJ-E3, includes: MPCIE-R1-ABGN-U3, scope of supply: manuals on CD-ROM, German/English, 1x joint block; for operation in the USA.

product brand name

SCALANCE

Technical Product Detail Page

<https://l.siemens.com/1P6GK5786-1FC00-0AB0>

transfer rate

transfer rate

- with WLAN / maximum 450 Mbit/s
- for Industrial Ethernet 10, 100, 1000 Mbit/s

interfaces

number of electrical connections

- for network components or terminal equipment 1
- for power supply 1
- for redundant voltage supply 1

type of electrical connection

- for network components or terminal equipment RJ45 socket
- 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)

memory

design of the removable storage

- C-PLUG Yes
- KEY-PLUG Yes

interfaces / wireless

number of radio cards / permanently installed

1

transmission mode / for multiple input multiple output (MIMO)

3x3

number of spatial streams

3

number of electrical connections / for external antenna(s)

3

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

- from Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af 48 V
- from Power-over-Ethernet according to IEEE802.3at for type 2 50 V
- from optional integrable power supply
 - at AC 100 ... 240 V
 - at DC 12 ... 24 V

consumed current

- at DC / at 24 V / typical 0.45 A

• at AC / at 230 V / typical • with Power-over-Ethernet according to IEEE802.3af for type 1 and IEEE802.3af / typical	0.05 A 0.22 A
power loss [W] • at DC / at 24 V / typical • at AC / at 230 V / typical • with Power-over-Ethernet according to IEEE802.3af for type 1 and IEEE802.3af / typical	10.7 W 10.7 W 10.7 W
supply voltage / 1 • from terminal block	19.2 V
supply voltage / 2 • from terminal block	28.8 V
ambient conditions	
ambient temperature • during operation • during storage • during transport	-40 ... +60 °C -40 ... +85 °C -40 ... +70 °C
relative humidity / at 25 °C / without condensation / during operation / maximum	100 %
ambient condition / for operation	When using the 100 - 240 V AC power supply, an operating temperature of -40 °C to +60 °C is permissible
protection class IP	IP65
design, dimensions and weights	
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
fastening method • S7-300 rail mounting • S7-1500 rail mounting • 35 mm DIN-rail mounting • wall mounting	For mast mounting, 35 mm DIN rail mounting and S7-300 rail mounting, an additional support plate is required Yes No Yes Yes
radio frequencies	
operating frequency • for WLAN in 2.4 GHz frequency band • for WLAN in 5 GHz frequency band	2.41 ... 2.48 GHz; depending on the country approvals 4.9 ... 5.8 GHz; depending on the country approvals
product features, product functions, product components / general	
product function / Access Point Mode	Yes
product function / client Mode	Yes
number of SSIDs	8
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' No Yes; Only in combination with 'KEY-PLUG W780 iFeatures' or 'KEY-PLUG W740 iFeatures'
number of iPCF-capable radio modules	1
product function / iREF	Yes; In combination only with 'KEY-PLUG W780 iFeatures'
number of iREF-capable radio modules	1
product function / iPRP	Yes; In combination with the 'KEY-PLUG W780 iFeatures' only
product functions / management, configuration, engineering	
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	Yes Yes Yes Yes Yes Yes

• operation with IWLAN controller • operation with Enterasys WLAN controller • forced roaming on IP down with IWLAN • forced roaming on link down with IWLAN • WDS	No No Yes Yes Yes
protocol / is supported • Address Resolution Protocol (ARP) • ICMP • Telnet • HTTP • HTTPS • TFTP • DCP • LLDP	Yes Yes Yes Yes Yes Yes Yes Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation	Yes Yes
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
product functions / diagnostics	
product function • PROFINET IO diagnosis • link check • connection monitoring IP-Alive • localization via Aeroscout • SysLog	Yes No No Yes Yes
protocol / is supported • SNMP v1 • SNMP v2 • SNMP v3	Yes Yes Yes
product functions / VLAN	
product function • function VLAN with IWLAN	Yes
product functions / DHCP	
product function • DHCP client • DHCP server • DHCP Option 82	Yes Yes Yes
product functions / redundancy	
protocol / is supported • STP/RSTP • MSTP • RSTP	Yes Yes Yes
product functions / security	
product function • ACL - MAC-based • management security, ACL-IP based • IEEE 802.1x (radius) • NAT/NAPT • access protection according to IEEE802.11i • WPA/WPA2 • TKIP/AES	Yes Yes Yes No Yes Yes Yes
protocol / is supported • SSH • RADIUS	Yes Yes
product functions / time	
protocol / is supported • NTP • SNTP • SIMATIC time synchronization (SIMATIC Time)	Yes Yes 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, FM16US0205X
• for safety / from CSA and UL	UL 60950-1 E115352, CSA C22.2 No. 60950-1
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	No
• NEMA TS2	No
• IEC 61375	No
• IEC 61850-3	No
• NEMA4X	Yes
• Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af	Yes
• Power-over-Ethernet according to IEEE802.3at for type 2	Yes
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	For operation in the USA, you will find more information under: www.siemens.de/funkzulassungen
standards, specifications, approvals / marine classification	
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• French marine classification society (BV)	Yes
• DNV GL	Yes
• Korean Register of Shipping (KRS)	Yes
• Lloyds Register of Shipping (LRS)	Yes
• Nippon Kaiji Kyokai (NK)	Yes
• Polski Rejestr Statkow (PRS)	Yes
• Royal Institution of Naval Architects (RINA)	Yes
standards, specifications, approvals / hazardous environments	
standard / for hazardous zone	EN 60079-15:2005, EN 60079-0:2006, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X
• 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 E240480
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes; GB3836.1, GB3836.8
• as marking	Ex nA IIC T4 Gc
accessories	
accessories	24 V DC screw terminal included in scope of delivery
further information / internet links	
internet link	
• to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to web page: WLAN country approval	https://www.siemens.com/wireless-approvals
• to the website: IWLAN	https://www.siemens.com/iwlan
• to website: Industrial communication	https://www.siemens.com/simatic-net
• to web page: SiePortal	https://sieportal.siemens.com/
• to website: Image database	https://www.automation.siemens.com/bilddb
• to website: CAX-Download-Manager	https://www.siemens.com/cax
• to website: Industry Online Support	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 Con-
formity](#)



[Manufacturer Declara-
tion](#)

[China RoHS](#)

General Product Ap- proval	For use in hazardous locations	Radio Equipment Type Approval Certi- ficate	Maritime application
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[CCC-Ex](#)

[Miscellaneous](#)



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