

product type designation



W788-2 RJ45

IWLAN Access Point, SCALANCE W788-2 RJ45, 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, 1x RJ45 max. 1 Gbit/s, PoE, redundant 24 V DC, joint block, IP30, -20...+60 °C, plug slot, WPA2/802.11i/e, signaling contact observe national approvals! CERT ID: RAPN-W2-RJ-E3, includes: MPCIE-R1-ABGN-U3, scope of delivery: Manuals on CD-ROM, German/English, 2x joint blocks; for operation outside of USA/Israel .

transfer rate

transfer rate	
• with WLAN / maximum	450 Mbit/s
• for Industrial Ethernet	10, 100, 1000 Mbit/s
transfer rate / for Industrial Ethernet	
• minimum	10 Mbit/s
• maximum	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	4-pole screw terminal, PoE

memory

design of the removable storage	
• C-PLUG	Yes
• 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	Yes

signal inputs/outputs

number of digital inputs	1
number of digital outputs	1
type of electrical connection / at the digital inputs/outputs	4-pole screw terminal
input voltage / at digital input / at DC	24 V
output voltage / at digital output / at DC / maximum	24 V

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

consumed current	
• at DC / at 24 V / typical	0.63 A
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	0.22 A
• with Power-over-Ethernet according to IEEE802.3at for type 2 / typical	0.3 A
power loss [W]	
• at DC / at 24 V / typical	15 W
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	10.7 W
• with Power-over-Ethernet according to IEEE802.3at for type 2 / typical	15 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	-20 ... +60 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
relative humidity / at 25 °C / without condensation / during operation / maximum	90 %
ambient condition / for operation	When used under hazardous conditions (Zone 2), the SCALANCE W788-x or W748-x product must be installed in an enclosure. To comply with EN 50021, this enclosure must meet the requirements of at least IP 54 in compliance with EN 60529.
protection class IP	IP30
design, dimensions and weights	
width / of the enclosure / without antenna	200 mm
height / of the enclosure / without antenna	158 mm
depth / of the enclosure / without antenna	79 mm
net weight	1.7 kg
fastening method	For 35 mm DIN rail mounting an additional mounting adapter is required
• S7-300 rail mounting	Yes
• S7-1500 rail mounting	Yes
• 35 mm top hat DIN rail mounting	Yes
• wall mounting	Yes
radio frequencies	
operating frequency	
• for WLAN in 2.4 GHz frequency band	2.41 ... 2.48 GHz; depending on the country approvals
• for WLAN in 5 GHz frequency band	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	16
product function	
• iPCF Access Point	Yes; Only in combination with the 'KEY-PLUG W780 iFeatures'
• iPCF client	Yes; Only in combination with the 'KEY-PLUG W780 iFeatures' or 'KEY-PLUG W740 iFeatures'
• iPCF-MC Access Point	Yes; Only in combination with the 'KEY-PLUG W780 iFeatures'
• iPCF-MC client	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, engineering	
number of manageable IP addresses / in client	8
product function	
• CLI	Yes
• web-based management	Yes
• MIB support	Yes

• 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 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 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	Yes Yes

• SIMATIC time synchronization (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, 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	No
• Power-over-Ethernet according to 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	You will find the current list of countries at: 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 and screw terminal for digital input and output included in the scope of delivery
further information / internet links	
internet link	
• to the website: IWLAN	http://www.siemens.com/iwlan
• to website: Image database	https://www.automation.siemens.com/bilddb
• 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)

Approvals / Certificates

General Product Approval	For use in hazardous locations
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[Manufacturer Declaration](#)


EG-Konf.


IECEX


ATEX

[FM](#)

[CCC-Ex](#)

Radio Equipment Type Approval Certificate	Marine / Shipping
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[other radio approvals](#) [other radio approvals](#)


ABS


BUREAU VERITAS


DNV


LRS

Marine / Shipping	other	Environment
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[NK / Nippon Kaiji Kyokai](#)


PRS


RINA


KR

[Manufacturer Declaration](#)

[Confirmation](#)

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