

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	
<ul style="list-style-type: none"> with WLAN / maximum 	450 Mbit/s
<ul style="list-style-type: none"> for Industrial Ethernet 	10, 100, 1000 Mbit/s
transfer rate / for Industrial Ethernet	
<ul style="list-style-type: none"> minimum 	10 Mbit/s
<ul style="list-style-type: none"> maximum 	1000 Mbit/s

interfaces

number of electrical connections	
<ul style="list-style-type: none"> for network components or terminal equipment 	1
<ul style="list-style-type: none"> for power supply 	1
<ul style="list-style-type: none"> for redundant voltage supply 	1
type of electrical connection	
<ul style="list-style-type: none"> for network components or terminal equipment 	RJ45 socket
<ul style="list-style-type: none"> for power supply 	4-pole screw terminal, PoE
design of the removable storage	
<ul style="list-style-type: none"> C-PLUG 	Yes
<ul style="list-style-type: none"> KEY-PLUG 	Yes

memory

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	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
signal range / at digital input	24 V DC, safety extra-low voltage
signal range / at digital output	24 V DC / 1 A

supply voltage, current consumption, power loss

type of voltage / of the supply voltage	DC
supply voltage	

<ul style="list-style-type: none"> • from Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af 	48 V
<ul style="list-style-type: none"> • from Power-over-Ethernet according to IEEE802.3at for type 2 	50 V
consumed current	
<ul style="list-style-type: none"> • at DC / at 24 V / typical 	0.63 A
<ul style="list-style-type: none"> • with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical 	0.22 A
<ul style="list-style-type: none"> • with Power-over-Ethernet according to IEEE802.3at for type 2 / typical 	0.3 A
power loss [W]	
<ul style="list-style-type: none"> • at DC / at 24 V / typical 	15 W
<ul style="list-style-type: none"> • with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical 	10.7 W
<ul style="list-style-type: none"> • with Power-over-Ethernet according to IEEE802.3at for type 2 / typical 	15 W
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

ambient conditions

ambient temperature	
<ul style="list-style-type: none"> • during operation 	-20 ... +60 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +85 °C
<ul style="list-style-type: none"> • 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
<ul style="list-style-type: none"> • S7-300 rail mounting 	Yes
<ul style="list-style-type: none"> • S7-1500 rail mounting 	Yes
<ul style="list-style-type: none"> • 35 mm top hat DIN rail mounting 	Yes
<ul style="list-style-type: none"> • wall mounting 	Yes

radio frequencies

operating frequency	
<ul style="list-style-type: none"> • for WLAN in 2.4 GHz frequency band 	2.41 ... 2.48 GHz; depending on the country approvals
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • iPCF Access Point 	Yes; Only in combination with the 'KEY-PLUG W780 iFeatures'
<ul style="list-style-type: none"> • iPCF client 	Yes; Only in combination with the 'KEY-PLUG W780 iFeatures' or 'KEY-PLUG W740 iFeatures'
<ul style="list-style-type: none"> • iPCF-MC Access Point 	Yes; Only in combination with the 'KEY-PLUG W780 iFeatures'
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • CLI 	Yes

<ul style="list-style-type: none"> • web-based management 	Yes
<ul style="list-style-type: none"> • MIB support 	Yes
<ul style="list-style-type: none"> • TRAPs via email 	Yes
<ul style="list-style-type: none"> • configuration with STEP 7 	Yes
<ul style="list-style-type: none"> • configuration with STEP 7 in the TIA Portal 	Yes
<ul style="list-style-type: none"> • operation with IWLAN controller 	No
<ul style="list-style-type: none"> • operation with Enterasys WLAN controller 	No
<ul style="list-style-type: none"> • forced roaming on IP down with IWLAN 	Yes
<ul style="list-style-type: none"> • forced roaming on link down with IWLAN 	Yes
<ul style="list-style-type: none"> • WDS 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • Address Resolution Protocol (ARP) 	Yes
<ul style="list-style-type: none"> • ICMP 	Yes
<ul style="list-style-type: none"> • Telnet 	Yes
<ul style="list-style-type: none"> • HTTP 	Yes
<ul style="list-style-type: none"> • HTTPS 	Yes
<ul style="list-style-type: none"> • TFTP 	Yes
<ul style="list-style-type: none"> • DCP 	Yes
<ul style="list-style-type: none"> • LLDP 	Yes
identification & maintenance function	
<ul style="list-style-type: none"> • I&M0 - device-specific information 	Yes
<ul style="list-style-type: none"> • I&M1 - higher level designation/location designation 	Yes
product functions / diagnostics	
product function	
<ul style="list-style-type: none"> • PROFINET IO diagnosis 	Yes
<ul style="list-style-type: none"> • link check 	No
<ul style="list-style-type: none"> • connection monitoring IP-Alive 	No
<ul style="list-style-type: none"> • localization via Aeroscout 	Yes
<ul style="list-style-type: none"> • SysLog 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • SNMP v1 	Yes
<ul style="list-style-type: none"> • SNMP v2 	Yes
<ul style="list-style-type: none"> • SNMP v3 	Yes
product functions / VLAN	
product function	
<ul style="list-style-type: none"> • function VLAN with IWLAN 	Yes
product functions / DHCP	
product function	
<ul style="list-style-type: none"> • DHCP client 	Yes
<ul style="list-style-type: none"> • DHCP server 	Yes
<ul style="list-style-type: none"> • DHCP Option 82 	Yes
product functions / redundancy	
protocol / is supported	
<ul style="list-style-type: none"> • STP/RSTP 	Yes
<ul style="list-style-type: none"> • MSTP 	Yes
<ul style="list-style-type: none"> • RSTP 	Yes
product functions / security	
product function	
<ul style="list-style-type: none"> • ACL - MAC-based 	Yes
<ul style="list-style-type: none"> • management security, ACL-IP based 	Yes
<ul style="list-style-type: none"> • IEEE 802.1x (radius) 	Yes
<ul style="list-style-type: none"> • NAT/NAPT 	No
<ul style="list-style-type: none"> • access protection according to IEEE802.11i 	Yes
<ul style="list-style-type: none"> • WPA/WPA2 	Yes
<ul style="list-style-type: none"> • TKIP/AES 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • SSH 	Yes
<ul style="list-style-type: none"> • RADIUS 	Yes
product functions / time	
protocol / is supported	
<ul style="list-style-type: none"> • NTP 	Yes
<ul style="list-style-type: none"> • SNTP 	Yes

<ul style="list-style-type: none"> • SIMATIC time synchronization (SIMATIC Time) 	Yes
standards, specifications, approvals	
certificate of suitability	
<ul style="list-style-type: none"> • EC Declaration of Conformity • CE marking • C-Tick • E1 approval • railway application in accordance with EN 50155 • railway application in accordance with EN 50121-4 • NEMA TS2 • IEC 61375 • IEC 61850-3 • NEMA4X • Power-over-Ethernet according IEEEE802.3at for type 1 and IEEEE802.3af • Power-over-Ethernet according to IEEEE802.3at for type 2 	<ul style="list-style-type: none"> Yes Yes Yes Yes No No No No No No Yes Yes
standard for wireless communication	
<ul style="list-style-type: none"> • IEEE 802.11a • IEEE 802.11b • IEEE 802.11e • IEEE 802.11g • IEEE 802.11h • IEEE 802.11i • IEEE 802.11n 	<ul style="list-style-type: none"> Yes Yes Yes Yes Yes Yes Yes
wireless approval	You will find the current list of countries at: www.siemens.de/funkzulassungen
standards, specifications, approvals / marine classification	
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • DNV GL • Korean Register of Shipping (KRS) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) • Royal Institution of Naval Architects (RINA) 	<ul style="list-style-type: none"> Yes Yes Yes Yes Yes Yes Yes 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
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes
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	
<ul style="list-style-type: none"> • to website: TIA Selection Tool • to web page: selection aid 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 	<ul style="list-style-type: none"> http://www.siemens.com/tia-selection-tool http://www.siemens.com/tia-selection-tool http://www.siemens.com/iwlan https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter http://automation.siemens.com/bilddb http://www.siemens.com/cax https://support.industry.siemens.com
security information	
security information	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)

last modified:

1/21/2021 