

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, terminal 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 terminal 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

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

ambient conditions

ambient temperature <ul style="list-style-type: none">• during operation	-20 ... +60 °C
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<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

<ul style="list-style-type: none"> operating frequency / for WLAN in 2.4 GHz frequency band 	2.41 ... 2.48 GHz; depending on the country approvals
<ul style="list-style-type: none"> operating frequency / 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
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product function		
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> Yes Yes Yes Yes Yes Yes No No Yes Yes Yes 	
protocol / is supported		
<ul style="list-style-type: none"> • Address Resolution Protocol (ARP) • ICMP • Telnet • HTTP • HTTPS • TFTP • DCP • LLDP 	<ul style="list-style-type: none"> Yes Yes Yes Yes Yes Yes Yes Yes 	
identification & maintenance function		
<ul style="list-style-type: none"> • I&M0 - device-specific information • I&M1 – higher level designation/location designation 	<ul style="list-style-type: none"> Yes Yes 	

product functions / diagnostics

product function		
<ul style="list-style-type: none"> • PROFINET IO diagnosis • link check • connection monitoring IP-Alive • localization via Aeroscout • SysLog 	<ul style="list-style-type: none"> Yes No No Yes Yes 	
protocol / is supported		
<ul style="list-style-type: none"> • SNMP v1 • SNMP v2 • SNMP v3 	<ul style="list-style-type: none"> Yes Yes Yes 	

product functions / VLAN

product function		
<ul style="list-style-type: none"> • function VLAN with IWLAN 	<ul style="list-style-type: none"> Yes 	

product functions / DHCP

product function	
<ul style="list-style-type: none"> • DHCP client • DHCP server • DHCP Option 82 	<p>Yes</p> <p>Yes</p> <p>Yes</p>
product functions / redundancy	
protocol / is supported	
<ul style="list-style-type: none"> • STP/RSTP • MSTP • RSTP 	<p>Yes</p> <p>Yes</p> <p>Yes</p>
product functions / security	
product function	
<ul style="list-style-type: none"> • ACL - MAC-based • management security, ACL-IP based • IEEE 802.1x (radius) • NAT/NAPT • access protection according to IEEE802.11i • WPA/WPA2 • TKIP/AES 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
protocol / is supported	
<ul style="list-style-type: none"> • SSH • RADIUS 	<p>Yes</p> <p>Yes</p>
product functions / time	
protocol / is supported	
<ul style="list-style-type: none"> • NTP • SNTP • SIMATIC time synchronization (SIMATIC Time) 	<p>Yes</p> <p>Yes</p> <p>Yes</p>
standards, specifications, approvals	
standard	
<ul style="list-style-type: none"> • for FM • for hazardous zone • for safety / from CSA and UL • for hazardous zone / from CSA and UL 	<p>FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4</p> <p>EN 60079-15:2005, EN 60079-0:2006, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X</p> <p>UL 60950-1, CSA C22.2 No. 60950-1</p> <p>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</p>
certificate of suitability	
<ul style="list-style-type: none"> • EC Declaration of Conformity • CE marking • C-Tick • E1 approval 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

<ul style="list-style-type: none"> • railway application in accordance with EN 50155 	No
<ul style="list-style-type: none"> • railway application in accordance with EN 50121-4 	No
<ul style="list-style-type: none"> • NEMA TS2 	No
<ul style="list-style-type: none"> • IEC 61375 	No
<ul style="list-style-type: none"> • IEC 61850-3 	No
<ul style="list-style-type: none"> • NEMA4X 	No
<ul style="list-style-type: none"> • Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af 	Yes
<ul style="list-style-type: none"> • Power-over-Ethernet according to IEEE802.3at for type 2 	Yes
<ul style="list-style-type: none"> • standard for wireless communication / IEEE 802.11a 	Yes
<ul style="list-style-type: none"> • standard for wireless communication / IEEE 802.11b 	Yes
<ul style="list-style-type: none"> • standard for wireless communication / IEEE 802.11e 	Yes
<ul style="list-style-type: none"> • standard for wireless communication / IEEE 802.11g 	Yes
<ul style="list-style-type: none"> • standard for wireless communication / IEEE 802.11h 	Yes
<ul style="list-style-type: none"> • standard for wireless communication / IEEE 802.11i 	Yes
<ul style="list-style-type: none"> • standard for wireless communication / 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) • 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) 	Yes Yes Yes Yes Yes Yes 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	

- 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

<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

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