

Product type designation

SCALANCE W788-1RR

IWLAN ACCESS POINT POINT SCALANCE W788-1RR, FOR USE OUTSIDE OF USA, 1 RADIO INTERFACE, IEEE 802.11 B/G/A/H, INDUSTRIAL WIRELESS LAN WITH RAPID ROAMING (IWLAN RR), 2.4/5 GHZ, UP TO 54MBIT/S, WPA2/802.11I/11E, NOTE NATIONAL APPROVALS, POE, IP65 (-20-+60 DGR C), EN50155, SCOPE OF SUPPLY:2X ANT 795-4MR, IP67 HYBRID PLUG CONNECTOR, MOUNTING ACCESSORIES, MANUALS ON CD-ROM GER/ENG;



Figure similar

Transmission rate	
<ul style="list-style-type: none"> • Transfer rate / with WLAN / maximum 	54 Mbit/s
<ul style="list-style-type: none"> • Transfer rate / for Industrial Ethernet 	10, 100 Mbit/s
Transfer rate / for Industrial Ethernet	
<ul style="list-style-type: none"> • minimum 	10 Mbit/s
<ul style="list-style-type: none"> • maximum 	100 Mbit/s
Transfer rate / Note	
	Due to the simultaneous use of several radio channels, a transmission rate of 108 Mbit/s is possible (turbo mode)
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 	Hybrid socket, RJ45 integrated
<ul style="list-style-type: none"> • for power supply 	M12 interface (4-pole, A-coded), hybrid socket, PoE

design of the removable storage	
<ul style="list-style-type: none"> • C-PLUG 	Yes
<ul style="list-style-type: none"> • KEY-PLUG 	No

Interfaces / wireless

Number of radio cards / permanently installed	1
Number of electrical connections / for external antenna(s)	2
Type of electrical connection / for external antenna(s)	R-SMA (socket)
Product feature / external antenna can be mounted directly on device	Yes

Supply voltage, current consumption, power loss

Type of voltage / of the supply voltage	DC
Supply voltage / 1	
<ul style="list-style-type: none"> • from M12 Power Connector (A-coded) for redundant power supply 	24 V
<ul style="list-style-type: none"> • from IE Hybrid Cable 2x2 + 4x0.34 	24 V
Supply voltage / 2	
<ul style="list-style-type: none"> • from M12 Power Connector (A-coded) for redundant power supply 	48 V
<ul style="list-style-type: none"> • from IE Hybrid Cable 2x2 + 4x0.34 	48 V
Supply voltage	
<ul style="list-style-type: none"> • from Power-over-Ethernet acc. to IEEE802.3at for type 1 and IEEE802.3af 	48 V

Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation 	-20 ... +60 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +70 °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 used under hazardous conditions (Zone 2), the SCALANCE W788-xPRO/RR or W74x-1PRO/RR 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	IP65

Design, dimensions and weight

Width / of the enclosure / without antenna	125 mm
Height / of the enclosure / without antenna	88 mm
Depth / of the enclosure / without antenna	108 mm
Net weight	1.05 kg
Mounting type	
<ul style="list-style-type: none"> • S7-300 rail mounting 	Yes

- S7-1500 rail mounting
- wall mounting

No
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

8

Product function

- Dual Client
- iHOP
- iPCF Access Point
- iPCF client
- iPCF-MC Access Point
- iPCF-MC client

No
No
Yes
Yes
No
No

Number of iPCF-capable radio modules

1

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
- iQoS
- forced roaming with IWLAN
- WDS

Yes
Yes
Yes
Yes
No
Yes
No
No
Yes
Yes
Yes

Protocol / is supported

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

Yes
Yes
Yes
Yes
Yes
Yes
Yes

<ul style="list-style-type: none"> • LLDP 	No
Identification & maintenance function	
<ul style="list-style-type: none"> • I&M0 - device-specific information 	No
<ul style="list-style-type: none"> • I&M1 – higher-level designation/location designation 	No
Product functions / Diagnosis	
Product function	
<ul style="list-style-type: none"> • PROFINET IO diagnosis 	Yes
<ul style="list-style-type: none"> • Link Check 	Yes
<ul style="list-style-type: none"> • connection monitoring IP-Alive 	Yes
<ul style="list-style-type: none"> • localization via Aeroscout 	No
<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"> • in Client Mode / DHCP server via LAN 	Yes
Product functions / Redundancy	
Protocol / is supported	
<ul style="list-style-type: none"> • STP/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 	No
<ul style="list-style-type: none"> • IEEE 802.1x (radius) 	Yes
<ul style="list-style-type: none"> • NAT/NAPT 	Yes
<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
Product functions / Time	
Protocol / is supported	
<ul style="list-style-type: none"> • SNTP 	Yes

- SIMATIC Time

No

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>ISA 12.12.01-2000, CSA C22.2 No. 213-M1987, CL. 1, Div. 2, GP. A,B,C,D, T4 / CL. 1, Zone 2, GP IIC, T4 / CL. 1, Zone 2, AEx nC IIC, T4</p>
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 • NEMA4X • Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>Yes</p>
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 • IEEE 802.11ac 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>No</p>
Wireless approval	For operation outside the USA, you can find more detailed information at: www.siemens.com/simatic-net/ik-info

Accessories

accessories	2 antennas, hybrid connector 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 	<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>

Security information

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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)

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