

### 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

#### Transfer rate

- with WLAN / maximum
- for Industrial Ethernet
- Note

54 Mbit/s

10 Mbit/s, 100 Mbit/s, 10 Mbit/s, 100 Mbit/s

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

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

1

1

1

#### Type of electrical connection

- for network components or terminal equipment
- for power supply

Hybrid socket, RJ45 integrated

M12 interface (4-pole, A-coded), hybrid socket, PoE

#### design of the removable storage

- C-PLUG

Yes

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

### Permitted ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-20 ... +60 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... +70 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-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"> <li>• S7-300 rail mounting</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• S7-1500 rail mounting</li> </ul>	No
<ul style="list-style-type: none"> <li>• wall mounting</li> </ul>	Yes

Wireless frequencies	
Operating frequency	
<ul style="list-style-type: none"> <li>• for WLAN in 2.4 GHz frequency band</li> </ul>	2.41 ... 2.48 GHz
<ul style="list-style-type: none"> <li>• for WLAN in 5 GHz frequency band</li> </ul>	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	
<ul style="list-style-type: none"> <li>• Dual Client</li> </ul>	No
<ul style="list-style-type: none"> <li>• iHOP</li> </ul>	No
<ul style="list-style-type: none"> <li>• iPCF Access Point</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• iPCF client</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• iPCF-MC Access Point</li> </ul>	No
<ul style="list-style-type: none"> <li>• iPCF-MC client</li> </ul>	No
Number of iPCF-capable radio modules	1
Product functions / management, configuration	
Number of manageable IP addresses / in client	8
Product function	
<ul style="list-style-type: none"> <li>• CLI</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• web-based management</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• MIB support</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• TRAPs via email</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Configuration with STEP 7</li> </ul>	No
<ul style="list-style-type: none"> <li>• configuration with STEP 7 in the TIA Portal</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• operation with IWLAN controller</li> </ul>	No
<ul style="list-style-type: none"> <li>• operation with Enterasys WLAN controller</li> </ul>	No
<ul style="list-style-type: none"> <li>• iQoS</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• forced roaming with IWLAN</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• WDS</li> </ul>	Yes
Protocol / is supported	
<ul style="list-style-type: none"> <li>• Address Resolution Protocol (ARP)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• ICMP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Telnet</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• HTTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• HTTPS</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• TFTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• DCP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• LLDP</li> </ul>	No
Identification & maintenance function	
<ul style="list-style-type: none"> <li>• I&amp;M0 - device-specific information</li> </ul>	No

- I&M1 – higher-level designation/location designation

No

### Product functions / Diagnosis

Product function	
• PROFINET IO diagnosis	Yes
• Link Check	Yes
• connection monitoring IP-Alive	Yes
• localization via Aeroscout	No
• SysLog	Yes
Protocol / is supported	
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes

### Product functions / VLAN

Product function	
• function VLAN with IWLAN	Yes

### Product functions / DHCP

Product function	
• DHCP client	Yes
• in Client Mode / DHCP server via LAN	Yes

### Product functions / Redundancy

Protocol / is supported	
• STP/RSTP	Yes

### Product functions / Security

Product function	
• ACL - MAC-based	Yes
• Management security, ACL-IP based	No
• IEEE 802.1x (radius)	Yes
• NAT/NAPT	Yes
• access protection according to IEEE802.11i	Yes
• WPA/WPA2	Yes
• TKIP/AES	Yes
Protocol / is supported	
• SSH	Yes

### Product functions / Time

Protocol / is supported	
• SNTP	Yes
• SIMATIC Time	No

### Standards, specifications, approvals

Standard	<ul style="list-style-type: none"> <li>• for FM</li> <li>• for hazardous zone</li> <li>• for safety / from CSA and UL</li> <li>• for hazardous zone / from CSA and UL</li> </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"> <li>• EC declaration of conformity</li> <li>• CE marking</li> <li>• C-Tick</li> <li>• E1 approval</li> <li>• Railway application in accordance with EN 50155</li> <li>• NEMA4X</li> <li>• Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af</li> </ul>	<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"> <li>• IEEE 802.11a</li> <li>• IEEE 802.11b</li> <li>• IEEE 802.11e</li> <li>• IEEE 802.11g</li> <li>• IEEE 802.11h</li> <li>• IEEE 802.11i</li> <li>• IEEE 802.11n</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p>
Wireless approval	For operation outside the USA, you can find more detailed information at: <a href="http://www.siemens.com/simatic-net/ik-info">www.siemens.com/simatic-net/ik-info</a>	

## Accessories

accessories

2 antennas, hybrid connector included in scope of delivery

## Further Information / Internet Links

Internet-Link

- to website: TIA Selection Tool <http://www.siemens.com/tia-selection-tool>
- to the website: IWLAN <http://www.siemens.com/iwlan>
- to website: Industry Mall <https://mall.industry.siemens.com>
- to website: Information and Download Center <http://www.siemens.com/industry/infocenter>
- to website: Image database <http://automation.siemens.com/bilddb>
- to website: CAx Download Manager <http://www.siemens.com/cax>
- to website: Industry Online Support <https://support.industry.siemens.com>

## Security information

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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)

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