

**Product-type designation**

**SCALANCE W747-1RR**



IWLAN RR ETHERNET CLIENT MODULE SCALANCE W747-1RR,  
 ONLY FOR USE IN USA, 1 RADIO INTERFACE,  
 IEEE 802.11B/G/A/H,  
 INDUSTRIAL WIRELESS LAN WITH RAPID ROAMING (IWLAN RR),  
 2.4/5GHZ, UP TO 54 MBIT/S,  
 WPA2/802.11I/11E, UP TO 8 DEVICES, NAT,  
 NOTE NATIONAL APPROVALS, POE,  
 IP65 (-20-+60 DGR C), EN50155,  
 SCOPE OF SUPPLY:2XANT 795-4MR,  
 IP67 HYBRID PLUG CONNECTOR,  
 MOUNT. MATERIAL,  
 MANUALS ON CD ROM GERMAN/ ENGLISH

**Transmission rate**

Transmission rate

- with W-LAN / maximum
- with Industrial Ethernet
- note

54 Mbit/s

10 ... 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 and terminal equipment
- for power supply
- for redundant power supply

1

1

1

Design of electrical connection

- for network components and 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

**Interfaces / wireless**

Number of radio cards / permanently installed

1

Number of electrical connections / for external antenna(s)

2

Design of the electrical connection / for external antenna(s)

R-SMA female (socket)

Product property / external antenna can be mounted directly on device	Yes
<b>Supply voltage, current consumption, power loss</b>	
Type of voltage / of supply voltage	DC
Supply voltage	
• 1 / from M12 Power Connector (A-coded) for redundant power supply	24 V
• 2 / from M12 Power Connector (A-coded) for redundant power supply	48 V
• from Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af	48 V
Current consumed	
• at 24 V / with DC / typical	0.25 A
• at 48 V / with DC / typical	0.13 A
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	0.13 A
Active power loss	
• at 24V / for DC / typical	7 W
• at 48 V / with DC / typical	7 W
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	7 W
<b>Permitted ambient conditions</b>	
Ambient temperature	
• during operating	-20 ... +60 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °C
Relative humidity / at 25 °C / without condensation / during operating / maximum	100 %
Protection class IP	IP65
Ambient condition / for (standard) operation mode	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.
<b>Design, dimensions and weight</b>	
Width / of enclosure / without antenna	125 mm
Height / of enclosure / without antenna	88 mm
Depth / of enclosure / without antenna	108 mm
Net weight	1.05 kg
Type of mounting	
• S7-300 rail mounting	Yes
• wall mounting	Yes
<b>Wireless frequencies</b>	
Radio frequency	

• for WLAN in 2.4 GHz frequency band	2.41 ... 2.48 GHz
• for WLAN in 5 GHz frequency band	4.9 ... 5.8 GHz
<b>Product properties, functions, components / general</b>	
Number of SSIDs	1
Product function	
• Dual Client	Yes
• iHOP	Yes
• iPCF	Yes
• iPCF-MC	Yes
Number of iPCF-capable radio modules	1
<b>Product functions / management, configuration</b>	
Number of manageable IP addresses / in client	8
Product function	
• CLI	Yes
• web-based management	Yes
• MIB support	Yes
• TRAPs via email	Yes
• Configuration with STEP 7	Yes
• configuration with STEP 7 in the TIA Portal	Yes
• operation with IWLAN controller	No
• operation with Enterasys WLAN controller	No
• iQoS	No
• forced roaming with IWLAN	No
• WDS	No
Protocol / is supported	
• Address Resolution Protocol (ARP)	Yes
• ICMP	Yes
• Telnet	Yes
• HTTP	Yes
• HTTPS	Yes
• TFTP	Yes
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes
• DCP	Yes
• LLDP	Yes
Identification & maintenance	
• I&M0 - device-specific information	Yes
• I&M1 - plant identification/location name	Yes

Product functions / Diagnosis	
Product function	
• PROFINET IO diagnosis	Yes
• Link Check	No
• connection monitoring IP-Alive	No
• localization via Aeroscout	No
• SysLog	Yes
Product functions / VLAN	
Product function / function VLAN with IWLAN	No
Product functions / DHCP	
Product function / DHCP client	Yes
Product functions / Security	
Product function	
• ACL - MAC-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
Standards, specifications, approvals	
Standard	
• for EMC / from FM	FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4
• for hazardous zone	EN 60079-15:2005, EN 60079-0:2006, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X
• for safety / of CSA and UL	UL 60950-1 CSA C22.2 No. 60950-1
• for hazardous area / of CSA and UL	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
Verification of suitability	
• CE mark	Yes
• EC declaration of conformity	Yes
• C-Tick	Yes
• CCC	No
• Railway application in accordance with EN 50155	No
• e1 approval	Yes
• E1 approval	Yes
• NEMA4X	No

<ul style="list-style-type: none"> <li>• Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af</li> </ul>	Yes
Standard for wireless communication	
<ul style="list-style-type: none"> <li>• IEEE 802.11a</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• IEEE 802.11b</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• IEEE 802.11e</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• IEEE 802.11g</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• IEEE 802.11h</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• IEEE 802.11i</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• IEEE 802.11n</li> </ul>	No
Wireless approval	For operation in 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>
Marine classification association	
<ul style="list-style-type: none"> <li>• American Bureau of Shipping Europe Ltd. (ABS)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Bureau Veritas (BV)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Det Norske Veritas (DNV)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Germanische Lloyd (GL)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Lloyds Register of Shipping (LRS)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Nippon Kaiji Kyokai (NK)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Polski Rejestr Statkow (PRS)</li> </ul>	No
<b>Accessories</b>	
Accessories	2 antennas, hybrid connector included in scope of delivery
<b>letzte Änderung:</b>	May 28, 2012