

IWLAN RR Ethernet Client Module SCALANCE W747-1, only for operation in USA, 1 radio interface, IEEE 802.11b/g/a/h, Industrial Wireless LAN with rapid roaming (IWLAN RR), 2.4/5 GHz, up to 54 Mbit/s, WPA2/802.11i/11E, up to 8 devices, NAT/PAT, Observe national approvals, PoE, 24 V DC IP30 (-20-+60 °C) 2x ext. antenna connections Scope of delivery: manuals only available as spare part DC 24 V terminal block



Figure similar

Transfer rate	
Transfer rate	
<ul style="list-style-type: none"> <li>with WLAN / maximum</li> <li>for Industrial Ethernet</li> </ul>	<p>54 Mbit/s</p> <p>10, 100 Mbit/s</p>
Transfer rate / for Industrial Ethernet	
<ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	<p>10 Mbit/s</p> <p>100 Mbit/s</p>
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"> <li>for network components or terminal equipment</li> <li>for power supply</li> <li>for redundant voltage supply</li> </ul>	<p>1</p> <p>1</p> <p>1</p>
Type of electrical connection	
<ul style="list-style-type: none"> <li>for network components or terminal equipment</li> <li>for power supply</li> </ul>	<p>RJ45 socket</p> <p>4-pole screw terminal, PoE</p>

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	
• from terminal block	24 V
Supply voltage / 2	
• from terminal block	48 V
Supply voltage	
• from Power-over-Ethernet acc. to IEEE802.3at for type 1 and IEEE802.3af	48 V
Consumed current	
• at DC / at 24 V / typical	0.23 A
• at DC / at 48 V / typical	0.12 A
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	0.12 A
Power loss [W]	
• at DC / at 24 V / typical	6 W
• at DC / at 48 V / typical	6 W
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	6 W

### Ambient conditions

Ambient temperature	
• during operation	-20 ... +60 °C
• during storage	-40 ... +70 °C
• during transport	-40 ... +70 °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 W784-x/xRR or W74x-1 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	100 mm
Height / of the enclosure / without antenna	205 mm
Depth / of the enclosure / without antenna	20 mm
Net weight	0.29 kg
Mounting type	For mounting on 35 mm DIN and S7-300 mounting rail, an additional adapter plate is required
<ul style="list-style-type: none"> <li>• S7-1500 rail mounting</li> <li>• wall mounting</li> </ul>	<p>No</p> <p>Yes</p>

### Radio frequencies

Operating frequency	
<ul style="list-style-type: none"> <li>• for WLAN in 2.4 GHz frequency band</li> <li>• for WLAN in 5 GHz frequency band</li> </ul>	<p>2.41 ... 2.48 GHz</p> <p>4.9 ... 5.8 GHz</p>

### Product features, product functions, product components / general

Product function / Access Point Mode	No
Product function / Client Mode	Yes
Product function	
<ul style="list-style-type: none"> <li>• Dual Client</li> <li>• iHOP</li> <li>• iPCF client</li> <li>• iPCF-MC client</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
Number of iPCF-capable radio modules	1

### Product functions / management, configuration, engineering

Number of manageable IP addresses / in client	8
Product function	
<ul style="list-style-type: none"> <li>• CLI</li> <li>• web-based management</li> <li>• MIB support</li> <li>• TRAPs via email</li> <li>• Configuration with STEP 7</li> <li>• configuration with STEP 7 in the TIA Portal</li> <li>• operation with IWLAN controller</li> <li>• operation with Enterasys WLAN controller</li> <li>• iQoS</li> <li>• forced roaming with IWLAN</li> <li>• WDS</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p>
Protocol / is supported	
<ul style="list-style-type: none"> <li>• Address Resolution Protocol (ARP)</li> <li>• ICMP</li> <li>• Telnet</li> <li>• HTTP</li> <li>• HTTPS</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

• TFTP	Yes
• DCP	Yes
• LLDP	Yes
Identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 – higher-level designation/location designation	Yes

### Product functions / Diagnostics

Product function	
• PROFINET IO diagnosis	Yes
• Link Check	No
• connection monitoring IP-Alive	No
• 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	No

### Product functions / DHCP

Product function	
• DHCP client	Yes
• DHCP server	Yes

### Product functions / Security

Product function	
• ACL - MAC-based	No
• 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 synchronization (SIMATIC Time)	No

## Standards, specifications, approvals

Standard	
<ul style="list-style-type: none"> <li>• for FM</li> </ul>	FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4
<ul style="list-style-type: none"> <li>• for hazardous zone</li> </ul>	EN 60079-15:2005, EN 60079-0:2006, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X (only approved in combination with an enclosure with degree of protection of at least IP 54)
<ul style="list-style-type: none"> <li>• for safety / from CSA and UL</li> </ul>	UL 60950-1, CSA C22.2 No. 60950-1
Certificate of suitability	
<ul style="list-style-type: none"> <li>• EC declaration of conformity</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• CE marking</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• C-Tick</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• E1 approval</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Railway application in accordance with EN 50155</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• NEMA4X</li> </ul>	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
<ul style="list-style-type: none"> <li>• IEEE 802.11ac</li> </ul>	No
Wireless approval	For operation in the USA, you will find more information under: <a href="http://www.siemens.de/funkzulassungen">www.siemens.de/funkzulassungen</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

## accessories

accessories	24 V DC screw terminal included in 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

### 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:**

02/05/2020