

Product type designation

SCALANCE W747-1RR

IWLAN RR Ethernet Client Module SCALANCE W747-1RR, for operation outside of 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, Observe national approvals, PoE, IP65 (-20-+60°C), EN 50155, Scope of delivery: 2x ANT795-4MR, IP67 hybrid plug-in connector, Only available as spare part on CD-ROM English/German



Figure similar

Transmission rate

| | |
|--|---|
| Transfer rate | |
| <ul style="list-style-type: none"> with WLAN / maximum for Industrial Ethernet | 54 Mbit/s 10, 100 Mbit/s |
| Transfer rate / for Industrial Ethernet | |
| <ul style="list-style-type: none"> minimum maximum | 10 Mbit/s 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 for power supply for redundant voltage supply | 1 1 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 |
| Consumed current | |
| <ul style="list-style-type: none"> • at DC / at 24 V / typical | 0.25 A |
| <ul style="list-style-type: none"> • at DC / at 48 V / typical | 0.13 A |
| <ul style="list-style-type: none"> • with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical | 0.13 A |
| Power loss [W] | |
| <ul style="list-style-type: none"> • at DC / at 24 V / typical | 7 W |
| <ul style="list-style-type: none"> • at DC / at 48 V / typical | 7 W |
| <ul style="list-style-type: none"> • with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical | 7 W |

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 | |
| • S7-300 rail mounting | Yes |
| • S7-1500 rail mounting | No |
| • wall mounting | Yes |

Wireless frequencies

| | |
|--------------------------------------|-------------------|
| Operating 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 |

Product properties, functions, components / general

| | |
|--------------------------------------|-----|
| Product function / Access Point Mode | No |
| Product function / Client Mode | Yes |
| Product function | |
| • Dual Client | Yes |
| • iHOP | Yes |
| • iPCF client | Yes |
| • iPCF-MC client | Yes |
| Number of iPCF-capable radio modules | 1 |

Product functions / management, configuration

| | |
|---|-----|
| 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 |
| • DCP | Yes |
| • LLDP | Yes |

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

Product functions / Diagnosis

| | |
|----------------------------------|-----|
| 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 |
| • in Client Mode / DHCP server via LAN | 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 | |
| <ul style="list-style-type: none"> • SSH | Yes |
| Product functions / Time | |
| Protocol / is supported | |
| <ul style="list-style-type: none"> • SNTP | Yes |
| <ul style="list-style-type: none"> • SIMATIC Time | No |
| Standards, specifications, approvals | |
| Standard | |
| <ul style="list-style-type: none"> • for FM | 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"> • for hazardous zone | EN 60079-15:2005, EN 60079-0:2006, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X |
| <ul style="list-style-type: none"> • for safety / from CSA and UL | UL 60950-1 CSA C22.2 No. 60950-1 |
| Certificate of suitability | |
| <ul style="list-style-type: none"> • EC declaration of conformity | Yes |
| <ul style="list-style-type: none"> • CE marking | Yes |
| <ul style="list-style-type: none"> • C-Tick | Yes |
| <ul style="list-style-type: none"> • E1 approval | Yes |
| <ul style="list-style-type: none"> • Railway application in accordance with EN 50155 | Yes |
| <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 |
| Standard for wireless communication | |
| <ul style="list-style-type: none"> • IEEE 802.11a | Yes |
| <ul style="list-style-type: none"> • IEEE 802.11b | Yes |
| <ul style="list-style-type: none"> • IEEE 802.11e | Yes |
| <ul style="list-style-type: none"> • IEEE 802.11g | Yes |
| <ul style="list-style-type: none"> • IEEE 802.11h | Yes |
| <ul style="list-style-type: none"> • IEEE 802.11i | Yes |
| <ul style="list-style-type: none"> • IEEE 802.11n | No |
| <ul style="list-style-type: none"> • IEEE 802.11ac | No |
| 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) | No |
| <ul style="list-style-type: none"> • Bureau Veritas (BV) | No |
| <ul style="list-style-type: none"> • Det Norske Veritas (DNV) | No |
| <ul style="list-style-type: none"> • Germanische Lloyd (GL) | No |
| <ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) | No |
| <ul style="list-style-type: none"> • Nippon Kaiji Kyokai (NK) | No |

- Polski Rejestr Statkow (PRS)

No

Accessories

accessories

2 antennas, hybrid connector 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

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