

Product-type designation

SCALANCE W747-1



IWLAN RR ETHERNET CLIENT MODULE SCALANCE W747-1,
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/PAT, NOTE NATIONAL APPROVALS, POE,
24V DC,
IP30 (-20-+60 DGR C) 2XEXT. ANTENNA CONNECTIONS
SCOPE OF SUPPLY: MANUALS ON CD ROM GERMAN/
ENGLISH 24VDC TERMINAL BLOCK

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

RJ45 socket

4-pole screw terminal, PoE

design of the removable storage / C-PLUG

Yes

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)

Supply voltage, current consumption, power loss

Type of voltage / of supply voltage

DC

Supply voltage	
• 1 / from terminal block	24 V
• 2 / from terminal block	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	0.23 A
• at 48 V / with DC / typical	0.12 A
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	0.12 A
Active power loss	
• at 24V / for DC / typical	6 W
• at 48 V / with DC / typical	6 W
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	6 W
Permitted ambient conditions	
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	90 %
Protection class IP	IP30
Design, dimensions and weight	
Width / of enclosure / without antenna	100 mm
Height / of enclosure / without antenna	205 mm
Depth / of enclosure / without antenna	20 mm
Net weight	0.29 kg
Type of mounting	
• wall mounting	Yes
Type of mounting	For mounting on 35 mm DIN and S7-300 mounting rail, an additional adapter plate is required
Wireless frequencies	
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
Product properties, functions, components / general	
Number of SSIDs	1
Product function	
• Dual Client	Yes
• iHOP	Yes

• iPCF	No
• iPCF-MC	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
• SMTP server	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 (only approved in combination with an enclosure with degree of protection of at least IP 54)
• 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 (only approved in combination with an enclosure with degree of protection of at least IP 54)
Verification of suitability	
• CE mark	Yes
• EC declaration of conformity	Yes
• C-Tick	Yes
• CCC	No
• Railway application in accordance with EN 50155	Yes
• e1 approval	Yes
• E1 approval	Yes
• NEMA4X	No
• Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af	Yes
Standard for wireless communication	
• IEEE 802.11a	Yes
• IEEE 802.11b	Yes
• IEEE 802.11e	Yes

• IEEE 802.11g	Yes
• IEEE 802.11h	Yes
• IEEE 802.11i	Yes
• IEEE 802.11n	No
Wireless approval	For operation in the USA, you can find more detailed information at: www.siemens.com/simatic-net/ik-info
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	No
• Bureau Veritas (BV)	No
• Det Norske Veritas (DNV)	No
• Germanische Lloyd (GL)	No
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (NK)	No
• Polski Rejestr Statkow (PRS)	No
Accessories	
Accessories	24 V DC screw terminal included in scope of delivery
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