

Product-type designation

SCALANCE W748-1 RJ45



IWLAN CLIENT, SCALANCE W748-1 RJ45, FOR USE OUTSIDE OF USA, 1 RADIO, 3 R-SMA ANT. CONNECT., IEEE 802.11A/B/G/H/N, 2.4/5GHZ, BRUTTO 450 MBIT/S PRO RADIO, 1 X RJ45 (MAX. 1 GBIT/S), POE, 2X24VDC, IP30 (-20-+60 DGR C), POE, WPA2/802.11I/E, SIGNALLING CONTACT, PLEASE NOTE NATIONAL APPROVALS! SCOPE OF SUPPLY: MANUALS ON CD ROM GERMAN/ENGLISH, 2 X TERMINAL BLOCK

Transmission rate

Transfer rate

- with W-LAN / maximum 450 Mbit/s
- with Industrial Ethernet 10 ... 1000 Mbit/s

Interfaces

Number of electrical connections

- for network components and terminal equipment 1
- for power supply 1
- for redundant power supply 1

Design of the electrical connection

- for network components and terminal equipment RJ45 socket
- for power supply 4-pole screw terminal, PoE

Version of the swap medium

- C-PLUG Yes
- KEY-PLUG Yes

Number of radio cards / permanently installed

1

Type of transmission / for multiple input multiple output (MIMO)

3x3

Number of spatial streams

3

Number of electrical connections / for external antenna(s)

3

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

R-SMA (socket)

Product property / external antenna can be mounted directly on device	Yes
Number of digital inputs	1
Number of digital outputs	1
Design of electrical connection / at the digital inputs/outputs	4-pole screw terminal
Signal range	
• at digital input	24 V DC, safety extra-low voltage
• at the digital output	24 V DC /1 A
Supply voltage, current consumption, power loss	
Type of / supply voltage	DC
Supply voltage	
• 1 / from terminal block	19.2 V
• 2 / from terminal block	28.8 V
• from Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af	48 V
• from Power-over-Ethernet according IEEE802.3at for type 2	50 V
Current consumed	
• at 24 V / with DC / typical	0.45 A
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	0.22 A
• with Power-over-Ethernet according to IEEE802.3at for type 2 / typical	0.21 A
Active power loss	
• at 24V / for DC / typical	10.7 W
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	10.7 W
• with Power-over-Ethernet according to IEEE802.3at for type 2 / typical	10.7 W
Permitted ambient conditions	
Ambient temperature	
• during operating	-20 ... +60 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °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	200 mm
Height / of enclosure / without antenna	158 mm
Depth / of enclosure / without antenna	79 mm
Net weight	1.7 kg
Mounting type	

• S7-300 rail mounting	Yes
• S7-1500 rail mounting	Yes
• wall mounting	Yes
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	
Product function	
• Access Point Mode	No
• Client Mode	Yes
Product function	
• Dual Client	No
• iPCF client	Yes
• note	Only in combination with the 'KEY-PLUG W780 iFeatures' or 'KEY-PLUG W740 iFeatures'
• iPCF-MC client	No
• note	In combination only with 'KEY-PLUG W780 iFeatures' or 'KEY-PLUG W740 iFeatures'
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	No
• configuration with STEP 7 in the TIA Portal	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 function	
• I&M0 - device-specific information	Yes
• I&M1 – higher level designation/location designation	Yes
Product functions / Diagnosis	
Product function	
• PROFINET IO diagnosis	No
• Link Check	No
• connection monitoring IP-Alive	No
• SysLog	Yes
Product functions / VLAN	
Product function / function VLAN with IWLAN	No
Product functions / DHCP	
Product function / DHCP client	Yes
Product function / in Client Mode / DHCP server via LAN	No
Product functions / Security	
Product function	
• Management security, ACL-IP based	Yes
• IEEE 802.1x (radius)	Yes
• NAT/NAPT	No
• 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	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
Verification of suitability	
• CE mark	Yes
• EC declaration of conformity	Yes

• C-Tick	Yes
• CCC	No
• Railway application in accordance with EN 50155	No
• fire protection in accordance with EN 45545-2	No
• E1 approval	Yes
• NEMA TS2	No
• IEC 61375	No
• IEC 61850-3	No
• NEMA4X	No
• Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af	Yes
• Power-over-Ethernet according to IEEE802.3at for type 2	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	Yes
Wireless approval	You will find the current list of countries at: www.siemens.de/funkzulassungen
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 and screw terminal for digital input and output included in the scope of delivery
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