

Product-type designation

SCALANCE W746-1PRO



IWLAN ETHERNET CLIENT MODULE SCALANCE W746-1PRO,
 FOR USE OUTSIDE OF USA 1 RADIO INTERFACE,
 IEEE 802.11B/G/A/H,
 INDUSTRIAL WIRELESS LAN (IWLAN),
 2.4/5GHZ, UP TO 54 MBIT/S,
 WPA2/802.11I/11E, UP TO 8 IP-DEVICES,
 NAT, NOTE NATIONAL APPROVALS, POE,
 IP65 (-20-+60 DGR C), EN50155,
 LIEFERUMF.: 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 the 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 (socket)

Product property / external antenna can be mounted directly on device	Yes
Supply voltage, current consumption, power loss	
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
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	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.
Design, dimensions and weight	
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
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
• iHOP	No
• iPCF client	No
• iPCF-MC client	No
Number of iPCF-capable radio modules	0
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
• 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	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
• 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 / SSH	Yes
Product functions / Time	
Protocol / is supported	
• SNTP	Yes
• SIMATIC Time	No
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
• Railway application in accordance with EN 50155	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	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	2 antennas, hybrid connector included in scope of delivery
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