

Product type designation



SCALANCE W788-1PRO

IWLAN ACCESS POINT SCALANCE W788-1PRO, FOR USE OUTSIDE OF USA, 1 RADIO INTERFACE, IEEE 802.11B/G/A/H, INDUSTRIAL WIRELESS LAN (IWLAN) 2.4/5 GHZ, UP TO 54MBIT/S, WPA2/802.11I/11E, NOTE NATIONAL APPROVALS, POE, IP65(-20-+60 DGR C), EN50155, SCOPE OF SUPPLY: 2XANT 795-4MR, IP67 HYBRID-PLUG CONNECTOR, MOUNT. MAT., MAN. ON CD ROM AVAILABLE AS SPARE PART ONLY

Transmission rate

• Transfer rate / with WLAN / maximum	54 Mbit/s
• Transfer rate / for Industrial Ethernet	10, 100 Mbit/s
Transfer rate / for Industrial Ethernet	
• minimum	10 Mbit/s
• maximum	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	
• for network components or terminal equipment	1
• for power supply	1
• for redundant voltage supply	1
Type of electrical connection	
• for network components or terminal equipment	Hybrid socket, RJ45 integrated
• for power supply	M12 interface (4-pole, A-coded), hybrid socket, PoE
design of the removable storage	

- C-PLUG
- KEY-PLUG

Yes

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 M12 Power Connector (A-coded) for redundant power supply	24 V
• from IE Hybrid Cable 2x2 + 4x0.34	24 V
Supply voltage / 2	
• from M12 Power Connector (A-coded) for redundant power supply	48 V
• from IE Hybrid Cable 2x2 + 4x0.34	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	0.25 A
• at DC / at 48 V / typical	0.125 A
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	0.125 A
Power loss [W]	
• at DC / at 24 V / typical	7 W
• at DC / at 48 V / 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 operation	-20 ... +60 °C
• during storage	-40 ... +70 °C
• 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	Yes
Product function / Client Mode	Yes
Number of SSIDs	8
Product function	
• Dual Client	No
• iHOP	No
• iPCF Access Point	No
• iPCF client	No
• iPCF-MC Access Point	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	Yes
• forced roaming with IWLAN	Yes
• WDS	Yes

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	Yes
• connection monitoring IP-Alive	Yes
• localization via Aeroscout	Yes
• SysLog	Yes
Protocol / is supported	
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes
Product functions / VLAN	
Product function	
• function VLAN with IWLAN	Yes
Product functions / DHCP	
Product function	
• DHCP client	Yes
• in Client Mode / DHCP server via LAN	Yes
Product functions / Redundancy	
Protocol / is supported	
• STP/RSTP	Yes
Product functions / Security	
Product function	
• ACL - MAC-based	Yes
• Management security, ACL-IP based	No
• IEEE 802.1x (radius)	Yes
• NAT/NAPT	Yes

• access protection according to IEEE802.11i • WPA/WPA2 • TKIP/AES	Yes
Protocol / is supported	Yes
• SSH	Yes
Product functions / Time	
Protocol / is supported	Yes
• SNTP • SIMATIC Time	No
Standards, specifications, approvals	
Standard	
• for FM • for hazardous zone • for safety / from CSA and UL • for hazardous zone / from CSA and UL	FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4 EN 60079-15:2005, EN 60079-0:2006, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X UL 60950-1 CSA C22.2 No. 60950-1 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
Certificate of suitability	
• EC declaration of conformity • CE marking • C-Tick • E1 approval • Railway application in accordance with EN 50155 • NEMA4X • Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af	Yes Yes Yes Yes Yes No Yes
Standard for wireless communication	
• IEEE 802.11a • IEEE 802.11b • IEEE 802.11e • IEEE 802.11g • IEEE 802.11h • IEEE 802.11i • IEEE 802.11n • IEEE 802.11ac	Yes Yes Yes Yes Yes Yes No 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)
- Bureau Veritas (BV)
- Det Norske Veritas (DNV)
- Germanische Lloyd (GL)
- Lloyds Register of Shipping (LRS)
- Nippon Kaiji Kyokai (NK)
- Polski Rejestr Statkow (PRS)

Yes
Yes
No
Yes
Yes
Yes
Yes

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

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