

product type designation



Figure similar

W746-1 (USA)

***** spare part ***** IWLAN Ethernet Client Module SCALANCE W746-1, only for operation in the USA, 1 radio interface, IEEE 802.11b/g/a/h, industrial wireless LAN (IWLAN), 2.4/5GHz, up to 54 Mbit/s, 24 V DC WPA2/802.11i/11E, up to 8 devices, NAT/PAT, observe national approvals, PoE, IP30 (-20+60 °C), 2x ext. antenna connections scope of delivery: manuals only available as spare part DC 24 V terminal block.

transfer rate

transfer rate	
• with WLAN / maximum	54 Mbit/s
• 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	RJ45 socket
• for power supply	4-pole screw terminal, PoE
design of the removable storage	
• C-PLUG	Yes
• KEY-PLUG	No

memory

design of the removable storage	
• C-PLUG	Yes
• 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	
• from Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af	48 V
consumed current	
• at DC / at 24 V / typical	0.23 A
• at DC / at 48 V / typical	0.12 A
• with Power-over-Ethernet according to IEEE802.3at for	0.12 A

type 1 and IEEE802.3af / typical	
power loss [W]	
• at DC / at 24 V / typical	6 W
• at DC / at 48 V / typical	6 W
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	6 W
supply voltage / 1	
• from terminal block	24 V
supply voltage / 2	
• from terminal block	48 V
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	90 %
ambient condition / for operation	When used under hazardous conditions (Zone 2), the SCALANCE W784-x/xRR or W74x-1 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	IP30
design, dimensions and weights	
width / of the enclosure / without antenna	100 mm
height / of the enclosure / without antenna	205 mm
depth / of the enclosure / without antenna	20 mm
net weight	0.29 kg
fastening method	For mounting on 35 mm DIN and S7-300 mounting rail, an additional adapter plate is required
• S7-1500 rail mounting	No
• wall mounting	Yes
radio frequencies	
operating frequency	
• for WLAN in 2.4 GHz frequency band	2.41 ... 2.48 GHz; depending on the country approvals
• for WLAN in 5 GHz frequency band	4.9 ... 5.8 GHz; depending on the country approvals
product features, product functions, product components / general	
product function / Access Point Mode	No
product function / 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, engineering	
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

<ul style="list-style-type: none"> • HTTP • HTTPS • TFTP • DCP • LLDP 	Yes Yes Yes Yes Yes
identification & maintenance function <ul style="list-style-type: none"> • I&M0 - device-specific information • I&M1 - higher level designation/location designation 	Yes Yes
product functions / diagnostics	
product function <ul style="list-style-type: none"> • PROFINET IO diagnosis • link check • connection monitoring IP-Alive • localization via Aeroscout • SysLog 	Yes No No No Yes
protocol / is supported <ul style="list-style-type: none"> • SNMP v1 • SNMP v2 • SNMP v3 	Yes Yes Yes
product functions / VLAN	
product function <ul style="list-style-type: none"> • function VLAN with IWLAN 	No
product functions / DHCP	
product function <ul style="list-style-type: none"> • DHCP client • DHCP server 	Yes Yes
product functions / security	
product function <ul style="list-style-type: none"> • ACL - MAC-based • management security, ACL-IP based • IEEE 802.1x (radius) • NAT/NAPT • access protection according to IEEE802.11i • WPA/WPA2 • TKIP/AES 	No No Yes Yes Yes Yes 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 • SIMATIC time synchronization (SIMATIC Time) 	Yes No
standards, specifications, approvals	
standard <ul style="list-style-type: none"> • for FM • for safety / from CSA and UL 	FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4 UL 60950-1, CSA C22.2 No. 60950-1
certificate of suitability <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • IEEE 802.11a • IEEE 802.11b • IEEE 802.11e • IEEE 802.11g • IEEE 802.11h 	Yes Yes Yes Yes Yes

<ul style="list-style-type: none"> • IEEE 802.11i • IEEE 802.11n 	Yes
wireless approval	No
	For operation in the USA, you will find more information under: www.siemens.de/funkzulassungen
standards, specifications, approvals / marine classification	
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • Det Norske Veritas (DNV) • Germanische Lloyd (GL) • Korean Register of Shipping (KRS) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) 	No
	No
	No
	No
	No
	No
	No
	No
standards, specifications, approvals / hazardous environments	
standard / 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)
accessories	
accessories	24 V DC screw terminal included in scope of delivery
further information / internet links	
internet link	
<ul style="list-style-type: none"> • to website: TIA Selection Tool • to web page: selection aid 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/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	<p>Siemens provides products and solutions with industrial security functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial security concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial security measures that may be implemented, please visit https://www.siemens.com/industrialsecurity. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Security RSS Feed under https://www.siemens.com/cert. (V4.6)</p>

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