

product type designation



W786-1PRO (USA)

***** spare part ***** IWLAN access point SCALANCE W786-1PRO, only for operation in USA, IEEE 802.11b/g/a/h, Industrial Wireless LAN (IWLAN) 2.4/5 GHz, up to 54 Mbit/s, WPA2/802.11i/11E, observe national approvals, 48 V DC, IP65 (-40-+70 °C), 2x ext. antenna connections 1 radio interface, PoE, RJ45 (twisted pair) socket scope of delivery: mounting hardware, manual on CD-ROM only available as spare part.

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	2-pin connector (48 V DC) or optionally available power supply adapter (4-pin 12 to 24 V DC or 3-pin 100 to 240 V AC)
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	No

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
• from optional integrable power supply	
— at AC	100 ... 240 V
— at DC	12 ... 24 V
consumed current	

<ul style="list-style-type: none"> • at DC / at 24 V / typical • at DC / at 48 V / typical • at AC / at 230 V / typical • with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical 	0.28 A 0.14 A 0.03 A 0.14 A
power loss [W] <ul style="list-style-type: none"> • at DC / at 24 V / typical • at DC / at 48 V / typical • at AC / at 230 V / typical • with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical 	6.5 W 6.5 W 6.5 W 6.5 W
supply voltage / 1 <ul style="list-style-type: none"> • from terminal block 	48 V
ambient conditions	
ambient temperature <ul style="list-style-type: none"> • during operation • during storage • during transport 	-40 ... +70 °C -40 ... +85 °C -40 ... +85 °C
relative humidity / at 25 °C / without condensation / during operation / maximum	100 %
ambient condition / for operation	When using the 100 - 240 V AC power supply, an operating temperature of -40 °C to +60 °C is permissible
protection class IP	IP65
design, dimensions and weights	
width / of the enclosure / without antenna	251 mm
height / of the enclosure / without antenna	251 mm
depth / of the enclosure / without antenna	72 mm
net weight	2.24 kg
fastening method	For mast mounting, 35 mm DIN rail mounting and S7-300 rail mounting, an additional support plate is required
<ul style="list-style-type: none"> • S7-1500 rail mounting • wall mounting 	No Yes
radio frequencies	
operating frequency <ul style="list-style-type: none"> • for WLAN in 2.4 GHz frequency band • for WLAN in 5 GHz frequency band 	2.41 ... 2.48 GHz; depending on the country approvals 4.9 ... 5.8 GHz; depending on the country approvals
product features, product functions, product components / general	
product function / Access Point Mode	Yes
product function / client Mode	Yes
number of SSIDs	8
product function <ul style="list-style-type: none"> • dual client • iHOP • iPCF Access Point • iPCF client • iPCF-MC Access Point • iPCF-MC client 	No No No No No No
number of iPCF-capable radio modules	0
product functions / management, configuration, engineering	
number of manageable IP addresses / in client	8
product function <ul style="list-style-type: none"> • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7 • configuration with STEP 7 in the TIA Portal • operation with IWLAN controller • operation with Enterasys WLAN controller • iQoS • forced roaming with IWLAN • WDS 	Yes Yes Yes Yes Yes Yes No No Yes Yes 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 / diagnostics	
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
• DHCP server	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	Yes
• WPA/WPA2	Yes
• TKIP/AES	Yes
protocol / is supported	
• SSH	Yes
product functions / time	
protocol / is supported	
• SNTP	Yes
• SIMATIC time synchronization (SIMATIC Time)	No
standards, specifications, approvals	
standard	
• for FM	FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4
• for safety / from CSA and UL	UL 60950-1, CSA C22.2 No. 60950-1
certificate of suitability	
• EC Declaration of Conformity	Yes
• CE marking	Yes
• C-Tick	Yes
• E1 approval	Yes
• railway application in accordance with EN 50155	No
• NEMA4X	Yes
• Power-over-Ethernet according IEEE802.3at for type 1	Yes

and IEEE802.3af	
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 will find more information under: www.siemens.de/funkzulassungen
standards, specifications, approvals / marine classification	
Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• French marine classification society (BV)	Yes
• Det Norske Veritas (DNV)	No
• Germanische Lloyd (GL)	Yes
• Korean Register of Shipping (KRS)	Yes
• Lloyds Register of Shipping (LRS)	Yes
• Nippon Kaiji Kyokai (NK)	Yes
• Polski Rejestr Statkow (PRS)	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
accessories	
accessories	48 V DC terminal block included in scope of delivery
further information / internet links	
internet link	
• to website: TIA Selection Tool	http://www.siemens.com/tia-selection-tool
• to web page: selection aid TIA Selection Tool	http://www.siemens.com/tia-selection-tool
• to the website: IWLAN	http://www.siemens.com/iwlan
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAX-Download-Manager	http://www.siemens.com/cax
• to website: Industry Online Support	https://support.industry.siemens.com
security information	
security information	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)

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