

**Product-type designation**

**SCALANCE W786-1PRO**



IWLAN ACCESS POINT SCALANCE W786-1PRO, FOR USE OUTSIDE OF USA, 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, 48VDC, IP65(-40-+70 DGR C), 2XINTERNAL ANTENNAS 1 RADIO INTERFACE, FO (GLASS-FO, MULTIMODE) SOCKET SCOPE OF SUPPLY: MOUNT. MAT., MANUAL ON CD ROM CD-ROM, GERMAN/ENGLISH; 48VDC TERMINAL BLOCK

**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 power supply
- for redundant power supply

1

1

Design of the electrical connection

- for power supply

2-pole connector (48 V DC) or optionally available power supply adapter (4-pole 12 to 24 V DC or 3-pole 100 to 240 V AC)

Number of optical interfaces / for optical waveguide / at 100 Mbit/s

1

Design of optical interface / for optical waveguide / at 100 Mbit/s

Duplex multimode FOC (ST)

design of the removable storage / C-PLUG

Yes

**Interfaces / wireless**

Number of radio cards / permanently installed

1

Number of internal antennas

2

**Supply voltage, current consumption, power loss**

Type of / supply voltage	DC
Supply voltage	
• 1 / from terminal block	48 V
• from Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af	48 V
• from optional integratable power supply	
• with AC	100 ... 240 V
• with DC	12 ... 24 V
Current consumed	
• at 24 V / with DC / typical	0.34 A
• at 48 V / with DC / typical	0.17 A
• at 230 V / with AC / typical	0.04 A
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	0.34 A
Effective power loss	
• at 24V / for DC / typical	8 W
• at 48 V / with DC / typical	8 W
• at 230 V / with AC / typical	8 W
• with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	8 W
<b>Permitted ambient conditions</b>	
Ambient temperature	
• during operating	-40 ... +70 °C
• during storage	-40 ... +85 °C
• during transport	-40 ... +85 °C
Relative humidity / at 25 °C / without condensation / during operating / maximum	100 %
Protection class IP	IP65
Ambient condition / for (standard) operation mode	When using the power supply 100 to 240 V AC, an operating temperature of -40 °C to +60 °C is permissible
<b>Design, dimensions and weight</b>	
Width / of enclosure / without antenna	251 mm
Height / of enclosure / without antenna	251 mm
Depth / of enclosure / without antenna	72 mm
Net weight	2.24 kg
Mounting type	
• wall mounting	Yes
Mounting type	For mast mounting, 35 mm DIN rail mounting and S7-300 rail mounting, an additional support plate is required
<b>Wireless frequencies</b>	
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
- Client Mode

Yes  
Yes

Number of SSIDs

8

#### Product function

- 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

Number of manageable IP addresses / in client

8

#### Product function

- 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)
- ICMP
- Telnet
- HTTP
- HTTPS
- TFTP
- SNMP v1
- SNMP v2
- SNMP v3
- DCP
- LLDP

Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes

Identification & maintenance function	
• I&M0 - device-specific information	Yes
• I&M1 – higher level designation/location designation	Yes
<b>Product functions / Diagnosis</b>	
Product function	
• PROFINET IO diagnosis	Yes
• Link Check	Yes
• connection monitoring IP-Alive	Yes
• localization via Aeroscout	Yes
• SysLog	Yes
<b>Product functions / VLAN</b>	
Product function / function VLAN with IWLAN	Yes
<b>Product functions / DHCP</b>	
Product function	
• DHCP client	Yes
• in Client Mode / DHCP server via LAN	Yes
<b>Product functions / Redundancy</b>	
Protocol / is supported / STP/RSTP	Yes
<b>Product functions / Security</b>	
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
<b>Product functions / Time</b>	
Protocol / is supported	
• SNTP	Yes
• SIMATIC Time	No
<b>Standards, specifications, approvals</b>	
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

UL 1604, CSA C22.2 No. 213-M1987, CL. 1, Div. 2, GP. A,B,C,D, T4 / CL. 1, Zone 2, GP IIC, T4

#### Verification of suitability

- CE mark
- EC declaration of conformity
- C-Tick
- Railway application in accordance with EN 50155
- E1 approval
- NEMA4X
- Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af

Yes  
Yes  
Yes  
No  
Yes  
Yes  
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

Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
No

#### Wireless approval

You will find the current list of countries at:  
[www.siemens.de/funkzulassungen](http://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  
No

### Accessories

#### Accessories

48 V DC terminal block included in scope of delivery

### Further Information / Internet Links

#### Internet-Link

- to website: Industry Mall
- to website: Information and Download Center
- to website: Image database
- to website: CAx Download Manager
- to website: Industry Online Support

<https://www.siemens.com/industrymall>  
<http://www.siemens.com/automation/net/catalog>  
<http://automation.siemens.com/bilddb>  
<http://www.siemens.com/cax>  
<http://support.automation.siemens.com>

### Security information

## Security information

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For the secure operation of Siemens products and solutions, it is necessary to take suitable preventive action (e.g. cell protection concept) and integrate each component into a holistic, state-of-the-art industrial security concept. Third-party products that may be in use should also be considered. For more information about industrial security, visit <http://www.siemens.com/industrialsecurity>.

To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <http://support.automation.siemens.com>.  
(V3.4)

## letzte Änderung:

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