

product type designation

product description



IWLAN Access Point

IWLAN Access Point, SCALANCE WAM766-1 EEC, 1 radio, 2.4/5 GHz, 2 N-Connect connections, iFeatures support via CLP, IEEE 802.11ax (Wi-Fi 6), 1201 Mbps (gross) per radio, 1x10/100/1000 Mbps M12 socket, redundant 24 V DC, M12 L-coded, PoE, for extended ambient conditions, IP65, -30...+75°C, CLP slot, DI/DO, A-coded, observe national approvals! CERT ID: MSAX65-W1-M12-E2 FCC ID: LYHMSAX65V1 operation outside of USA/Israel scope of delivery: sealing caps for connections

suitability for use

www.siemens.com/iwlan

transfer rate

transfer rate

- with WLAN / maximum
- for Industrial Ethernet

1201 Mbit/s
10, 100, 1000 Mbit/s

transfer rate / for Industrial Ethernet

- minimum
- maximum

10 Mbit/s
1000 Mbit/s

interfaces

number of electrical/optical connections / for network components or terminal equipment / maximum / note

1

number of electrical/optical connections / for gigabit Ethernet / maximum

1

number of electrical connections

- for network components or terminal equipment
- for power supply
- for redundant voltage supply

1
1
1

type of electrical connection

- for network components or terminal equipment
- for redundant voltage supply

M12 interface (8-pole, X-coded), PoE
M12 interface (4-pin, L-coded)

memory

design of the removable storage

- CLP
- CLP iFeatures

Yes
Yes

interfaces / wireless

number of radio cards / permanently installed

2

transmission mode / for multiple input multiple output (MIMO)

2x2

number of spatial streams

2

number of electrical connections / for external antenna(s)

2

type of electrical connection / for external antenna(s)

N-Connect (socket)

product feature / external antenna can be mounted directly on device

Yes

signal inputs/outputs

number of digital inputs

1

number of digital outputs

1

type of electrical connection / at the digital inputs/outputs

M12 interface (4-pin, A-coded)

input voltage / at digital input / at DC

-30 ... +30 V

output voltage / at digital output / at DC / maximum

24 V; 0,5 A

operational current / of the signaling contacts / at DC / at 30 V /

0.008 A

maximum	
supply voltage, current consumption, power loss	
type of voltage / of the supply voltage	Redundant 24 V DC Power Supply, M12, L-coded
supply voltage <ul style="list-style-type: none"> from Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af 	48 V
consumed current <ul style="list-style-type: none"> at DC / at 24 V at DC / at 24 V / sleep mode / maximum with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical 	0.55 A 0.013 A 0.27 A
power loss [W] <ul style="list-style-type: none"> at DC / at 24 V at DC / at 24 V / sleep mode / maximum with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical 	13.2 W 0.3 W 12.96 W
supply voltage / 1 <ul style="list-style-type: none"> from M12 power Connector (L-coded) for redundant voltage supply 	24 V
supply voltage / 1 / rated value <ul style="list-style-type: none"> type of voltage / 1 / of the supply voltage 	24 V DC
supply voltage / 2 <ul style="list-style-type: none"> from M12 power Connector (L-coded) for redundant voltage supply 	24 V
supply voltage / 2 / rated value <ul style="list-style-type: none"> type of voltage / 2 / of the supply voltage 	24 V DC
supply voltage / 3 / rated value <ul style="list-style-type: none"> type of voltage / 3 / of the supply voltage 	48 V DC, PoE
ambient conditions	
ambient temperature <ul style="list-style-type: none"> during operation during storage during transport 	-30 ... +75 °C -40 ... +85 °C -40 ... +85 °C
relative humidity / at 25 °C / without condensation / during operation / maximum	90 %
protection class IP	IP65
design, dimensions and weights	
width	150 mm
height	179.5 mm
depth	45 mm
width / of the enclosure / without antenna	150 mm
height / of the enclosure / without antenna	179.5 mm
depth / of the enclosure / without antenna	45 mm
net weight	1.1 kg
product feature / conformal coating	Yes
fastening method <ul style="list-style-type: none"> S7-300 rail mounting S7-1500 rail mounting 35 mm DIN-rail mounting wall mounting VESA mounting 	wall mounting and assembly on VESA support 75 x 75 mm, mounting on DIN rail with separate mounting adapter. Yes Yes Yes Yes Yes; 75 x 75mm
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"> iPCF Access Point 	No

<ul style="list-style-type: none"> • iPCF-2 access point 	Yes; iPCF-2 is not compatible with iPCF. See documentation for function description.
<ul style="list-style-type: none"> • iPCF client 	No
<ul style="list-style-type: none"> • iPCF-2 client 	Yes; iPCF-2 is not compatible with iPCF. See documentation for function description.
product function / iPRP	Yes
product functions / management, configuration, engineering	
number of manageable IP addresses / in client	2
product function	
<ul style="list-style-type: none"> • CLI 	Yes
<ul style="list-style-type: none"> • web-based management 	Yes
<ul style="list-style-type: none"> • MIB support 	Yes
<ul style="list-style-type: none"> • TRAPs via email 	Yes
<ul style="list-style-type: none"> • configuration with STEP 7 	Yes
<ul style="list-style-type: none"> • configuration with STEP 7 in the TIA Portal 	Yes
<ul style="list-style-type: none"> • WDS 	No
protocol / is supported	
<ul style="list-style-type: none"> • Address Resolution Protocol (ARP) 	Yes
<ul style="list-style-type: none"> • ICMP 	Yes
<ul style="list-style-type: none"> • Telnet 	Yes
<ul style="list-style-type: none"> • HTTP 	Yes
<ul style="list-style-type: none"> • HTTPS 	Yes
<ul style="list-style-type: none"> • TFTP 	Yes
<ul style="list-style-type: none"> • DCP 	Yes
<ul style="list-style-type: none"> • LLDP 	Yes
identification & maintenance function	
<ul style="list-style-type: none"> • I&M0 - device-specific information 	Yes
<ul style="list-style-type: none"> • I&M1 - higher level designation/location designation 	Yes
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
product functions / diagnostics	
product function	
<ul style="list-style-type: none"> • PROFINET IO diagnosis 	Yes
<ul style="list-style-type: none"> • SysLog 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • SNMP v1 	Yes
<ul style="list-style-type: none"> • SNMP v2 	Yes
<ul style="list-style-type: none"> • SNMP v3 	Yes
product functions / VLAN	
product function	
<ul style="list-style-type: none"> • function VLAN with IWLAN 	Yes
number of VLANs / maximum	24
product functions / DHCP	
product function	
<ul style="list-style-type: none"> • DHCP client 	Yes
product functions / redundancy	
protocol / is supported	
<ul style="list-style-type: none"> • STP/RSTP 	Yes
<ul style="list-style-type: none"> • MSTP 	Yes
<ul style="list-style-type: none"> • RSTP 	Yes
product function	
<ul style="list-style-type: none"> • redundancy procedure MSTP 	Yes
product functions / security	
product function	
<ul style="list-style-type: none"> • management security, ACL-IP based 	No
<ul style="list-style-type: none"> • IEEE 802.1x (radius) 	Yes
<ul style="list-style-type: none"> • NAT/NAPT 	Yes
<ul style="list-style-type: none"> • access protection according to IEEE802.11i 	Yes
<ul style="list-style-type: none"> • WPA/WPA2 	Yes
<ul style="list-style-type: none"> • WPA3 	Yes
<ul style="list-style-type: none"> • TKIP/AES 	Yes
<ul style="list-style-type: none"> • RADIUS client 	Yes

protocol / is supported	
<ul style="list-style-type: none"> • SSH 	Yes
key length	
<ul style="list-style-type: none"> • with SSL 	4096 bit

product functions / time

protocol / is supported	
<ul style="list-style-type: none"> • NTP 	Yes
<ul style="list-style-type: none"> • SNTP 	Yes
<ul style="list-style-type: none"> • SIMATIC time synchronization (SIMATIC Time) 	Yes

standards, specifications, approvals

certificate of suitability	
<ul style="list-style-type: none"> • EC Declaration of Conformity 	Yes
<ul style="list-style-type: none"> • CE marking 	Yes
<ul style="list-style-type: none"> • E1 approval 	Yes
<ul style="list-style-type: none"> • railway application in accordance with EN 50155 	Yes
<ul style="list-style-type: none"> • railway application in accordance with EN 50121-4 	Yes
<ul style="list-style-type: none"> • fire protection in accordance with EN 45545-2 	Yes
<ul style="list-style-type: none"> • Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af 	Yes

standard for wireless communication	
<ul style="list-style-type: none"> • IEEE 802.11a 	Yes
<ul style="list-style-type: none"> • IEEE 802.11b 	Yes
<ul style="list-style-type: none"> • IEEE 802.11e 	Yes
<ul style="list-style-type: none"> • IEEE 802.11g 	Yes
<ul style="list-style-type: none"> • IEEE 802.11h 	Yes
<ul style="list-style-type: none"> • IEEE 802.11i 	Yes
<ul style="list-style-type: none"> • IEEE 802.11n 	Yes
<ul style="list-style-type: none"> • IEEE 802.11ac 	Yes
<ul style="list-style-type: none"> • IEEE 802.11ax 	Yes
<ul style="list-style-type: none"> • IEEE 802.11r 	Yes

wireless approval	You will find the current list of countries at: www.siemens.com/wireless-approvals or directly on the device
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MTBF	24 a
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<ul style="list-style-type: none"> • reference temperature 	40 °C
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reference code	
<ul style="list-style-type: none"> • according to IEC 81346-2:2019 	KFE

standards, specifications, approvals / hazardous environments

standard / for hazardous zone	EN IEC 60079-0 : 2018, EN60079-7:2015 + A1 : 2018; II 3 G Ex ec IIC T4 Gc
<ul style="list-style-type: none"> • from CSA and UL 	UL121201, CAN/CSA C22.2 No.213, Cl. 1, div. 2, GP: A, B, C, D, T4 / Cl. 1, Zone 2, GP IIC T4, UL File E240480

standards, specifications, approvals / Environmental Product Declaration

Environmental Product Declaration	Yes
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global warming potential [CO2 eq]	
<ul style="list-style-type: none"> • total 	394.89 kg
<ul style="list-style-type: none"> • during manufacturing 	33.7 kg
<ul style="list-style-type: none"> • during operation 	361 kg
<ul style="list-style-type: none"> • after end of life 	0.19 kg

further information / internet links

internet link	
<ul style="list-style-type: none"> • to website: Selection guide for cables and connectors 	https://support.industry.siemens.com/cs/ww/en/view/109766358
<ul style="list-style-type: none"> • to web page: selection aid TIA Selection Tool 	https://www.siemens.com/tstcloud
<ul style="list-style-type: none"> • to web page: WLAN country approval 	https://www.siemens.com/wireless-approvals
<ul style="list-style-type: none"> • to the website: IWLAN 	https://www.siemens.com/iwlan
<ul style="list-style-type: none"> • to website: Industrial communication 	https://www.siemens.com/simatic-net
<ul style="list-style-type: none"> • to web page: SiePortal 	https://sieportal.siemens.com/
<ul style="list-style-type: none"> • to website: Image database 	https://www.automation.siemens.com/bilddb
<ul style="list-style-type: none"> • to website: CAx-Download-Manager 	https://www.siemens.com/cax
<ul style="list-style-type: none"> • to website: Industry Online Support 	https://support.industry.siemens.com

security information

security information	Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks
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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 cybersecurity 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 cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. 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 Cybersecurity RSS Feed under <https://www.siemens.com/cert>. (V4.7)

Approvals / Certificates

General Product Approval	For use in hazardous locations
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[Declaration of Conformity](#)



[Manufacturer Declaration](#)



For use in hazardous locations	Radio Equipment Type Approval Certificate	Environment
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[CCC-Ex](#)



[Miscellaneous](#)

[KC](#)

[Confirmation](#)

Environment



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