

product type designation

product description



IWLAN Access Point

IWLAN Access Point, SCALANCE WAM766-1, 1 radio, 2.4/5 GHz, IEEE 802.11ax (Wi-Fi 6), 2 N-Connect connections, iFeatures support via CLP, 1201 Mbps (gross) per radio, 1x 10/100/1000 Mbps M12 socket, redundant 24 V DC, M12 L-coded, PoE, IP65, -30...+60 °C, CLP slot, DI/DO, A-coded, observe national approvals! cert ID: MSAX65-W1-M12-E2, FCCID: LYHMSAXV, operation in the USA, scope of delivery: sealing caps for connections

suitability for use

www.siemens.com/iwlan

transfer rate

transfer rate

- | | |
|---------------------------|----------------------|
| • with WLAN / maximum | 1201 Mbit/s |
| • for Industrial Ethernet | 10, 100, 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	1
• for power supply	1
• for redundant voltage supply	1
type of electrical connection	
• for network components or terminal equipment	M12 interface (8-pole, X-coded), PoE
• for redundant voltage supply	M12 interface (4-pin, L-coded)

memory

design of the removable storage	
• CLP	Yes
• CLP iFeatures	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 / maximum	0.008 A

supply voltage, current consumption, power loss

type of voltage / of the supply voltage	Redundant 24 V DC Power Supply, M12, L-coded
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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 	0.55 A
<ul style="list-style-type: none"> at DC / at 24 V / sleep mode / maximum 	0.013 A
<ul style="list-style-type: none"> with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical 	0.27 A
power loss [W]	
<ul style="list-style-type: none"> at DC / at 24 V 	13.2 W
<ul style="list-style-type: none"> at DC / at 24 V / sleep mode / maximum 	0.3 W
<ul style="list-style-type: none"> with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical 	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	24 V
<ul style="list-style-type: none"> type of voltage / 1 / of the supply voltage 	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	24 V
<ul style="list-style-type: none"> type of voltage / 2 / of the supply voltage 	DC
supply voltage / 3 / rated value	48 V
<ul style="list-style-type: none"> type of voltage / 3 / of the supply voltage 	DC, PoE
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> during operation 	-30 ... +60 °C
<ul style="list-style-type: none"> during storage 	-40 ... +85 °C
<ul style="list-style-type: none"> during transport 	-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
fastening method	wall mounting and assembly on VESA support 75 x 75 mm, mounting on DIN rail with separate mounting adapter.
<ul style="list-style-type: none"> S7-300 rail mounting 	Yes
<ul style="list-style-type: none"> S7-1500 rail mounting 	Yes
<ul style="list-style-type: none"> 35 mm DIN-rail mounting 	Yes
<ul style="list-style-type: none"> wall mounting 	Yes
<ul style="list-style-type: none"> VESA mounting 	Yes; 75 x 75mm
radio frequencies	
operating frequency	
<ul style="list-style-type: none"> for WLAN in 2.4 GHz frequency band 	2.41 ... 2.48 GHz; depending on the country approvals
<ul style="list-style-type: none"> 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	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	
• 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
• WDS	No
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 function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
product functions / diagnostics	
product function	
• PROFINET IO diagnosis	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
number of VLANs / maximum	24
product functions / DHCP	
product function	
• DHCP client	Yes
product functions / redundancy	
protocol / is supported	
• STP/RSTP	Yes
• MSTP	Yes
• RSTP	Yes
product function	
• redundancy procedure MSTP	Yes
product functions / security	
product function	
• management security, ACL-IP based	No
• IEEE 802.1x (radius)	Yes
• NAT/NAPT	Yes
• access protection according to IEEE802.11i	Yes
• WPA/WPA2	Yes
• WPA3	Yes
• TKIP/AES	Yes
• RADIUS client	Yes
protocol / is supported	
• SSH	Yes
key length	
• with SSL	4096 bit

product functions / time	
protocol / is supported	
• NTP	Yes
• SNTP	Yes
• SIMATIC time synchronization (SIMATIC Time)	Yes
standards, specifications, approvals	
certificate of suitability	
• EC Declaration of Conformity	Yes
• CE marking	Yes
• E1 approval	Yes
• Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af	Yes
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	Yes
• IEEE 802.11ac	Yes
• IEEE 802.11ax	Yes
• 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
MTBF	24 a
• reference temperature	40 °C
reference code	
• 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
• 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
global warming potential [CO2 eq]	
• total	394.89 kg
• during manufacturing	33.7 kg
• during operation	361 kg
• after end of life	0.19 kg
further information / internet links	
internet link	
• to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
• to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
• to web page: WLAN country approval	https://www.siemens.com/wireless-approvals
• to the website: IWLAN	https://www.siemens.com/iwlan
• to website: Industrial communication	https://www.siemens.com/simatic-net
• to web page: SiePortal	https://sieportal.siemens.com/
• to website: Image database	https://www.automation.siemens.com/bilddb
• to website: CAX-Download-Manager	https://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 cybersecurity 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 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


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Approvals / Certificates

General Product Approval	For use in hazardous locations	Radio Equipment Type Approval Certificate
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Declaration of Conformity	Manufacturer Declaration	China RoHS	CCC-Ex		Miscellaneous
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Radio Equipment Type Approval Certificate	Environment
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