

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

transfer rate

transfer rate	
• with WLAN / maximum	1201 Mbit/s
• for Industrial Ethernet	10, 100, 1000 Mbit/s
transfer rate / for Industrial Ethernet	
• minimum	10 Mbit/s
• maximum	1000 Mbit/s

interfaces

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)
signal range / at digital input	-30 V DC 30 V
signal range / at digital output	24 V / 0.5 A DC
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	
from Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af	48 V
consumed current	
at DC / at 24 V	0.55 A
at DC / at 24 V / sleep mode / maximum	0.013 A
with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	0.27 A
power loss [W]	
at DC / at 24 V	13.2 W
at DC / at 24 V / sleep mode / maximum	0.3 W
with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	12.96 W
supply voltage / 1	
from M12 power Connector (L-coded) for redundant voltage supply	24 V
supply voltage / 1 / rated value	24 V
type of voltage / 1 / of the supply voltage	DC
supply voltage / 2	
from M12 power Connector (L-coded) for redundant voltage supply	24 V
supply voltage / 2 / rated value	24 V
type of voltage / 2 / of the supply voltage	DC
supply voltage / 3 / rated value	48 V
ambient conditions	
ambient temperature	
during operation	-30 ... +60 °C
during storage	-40 ... +85 °C
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.
35 mm top hat DIN rail mounting	Yes
wall mounting	Yes
VESA 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	Yes
product function / client Mode	Yes
number of SSIDs	8
product function	
iPCF Access Point	No
iPCF-2 access point	Yes; iPCF-2 is not compatible with iPCF. See documentation for function description.
iPCF client	No
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 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
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
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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