

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, FCC ID: LYHMSAX65V1 operation outside of USA/Israel 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)
design of the removable storage	
• CLP	Yes
• CLP iFeatures	Yes

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 /	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	48 V
ambient conditions	
ambient temperature <ul style="list-style-type: none"> during operation during storage during transport 	-30 ... +60 °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
fastening method <ul style="list-style-type: none"> 35 mm top hat 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
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 iPCF-2 access point iPCF client iPCF-2 client 	No Yes; iPCF-2 is not compatible with iPCF. See documentation for function description. No 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, solutions, machines, equipment and/or networks. They are important components in a holistic industrial security concept. With this in mind, Siemens' products and solutions undergo continuous development. Siemens recommends strongly that you regularly check for product updates. 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)
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