

### 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-encoded, PoE, for extended environmental conditions, IP65/IP67, -30...+75 °C, CLP slot, DI/DQ, A-encoded, 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](http://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

supply voltage	48 V
<ul style="list-style-type: none"> <li>from Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af</li> </ul>	
consumed current	0.55 A
<ul style="list-style-type: none"> <li>at DC / at 24 V</li> <li>at DC / at 24 V / sleep mode / maximum</li> <li>with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical</li> </ul>	0.013 A 0.27 A
power loss [W]	13.2 W
<ul style="list-style-type: none"> <li>at DC / at 24 V</li> <li>at DC / at 24 V / sleep mode / maximum</li> <li>with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical</li> </ul>	0.3 W 12.96 W
<b>supply voltage / 1</b>	24 V
<ul style="list-style-type: none"> <li>from M12 power Connector (L-coded) for redundant voltage supply</li> </ul>	
<b>supply voltage / 1 / rated value</b>	24 V
<ul style="list-style-type: none"> <li>type of voltage / 1 / of the supply voltage</li> </ul>	DC
<b>supply voltage / 2</b>	24 V
<ul style="list-style-type: none"> <li>from M12 power Connector (L-coded) for redundant voltage supply</li> </ul>	
<b>supply voltage / 2 / rated value</b>	24 V
<ul style="list-style-type: none"> <li>type of voltage / 2 / of the supply voltage</li> </ul>	DC
<b>supply voltage / 3 / rated value</b>	48 V
<ul style="list-style-type: none"> <li>type of voltage / 3 / of the supply voltage</li> </ul>	DC, PoE
<b>ambient conditions</b>	
ambient temperature	-30 ... +75 °C
<ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> <li>during transport</li> </ul>	-40 ... +85 °C -40 ... +85 °C
relative humidity / at 25 °C / without condensation / during operation / maximum	90 %
protection class IP	IP65
<b>design, dimensions and weights</b>	
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	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"> <li>S7-300 rail mounting</li> <li>S7-1500 rail mounting</li> <li>35 mm DIN-rail mounting</li> <li>wall mounting</li> <li>VESA mounting</li> </ul>	Yes Yes Yes Yes Yes; 75 x 75mm
<b>radio frequencies</b>	
operating frequency	2.41 ... 2.48 GHz; depending on the country approvals
<ul style="list-style-type: none"> <li>for WLAN in 2.4 GHz frequency band</li> <li>for WLAN in 5 GHz frequency band</li> </ul>	4.9 ... 5.8 GHz; depending on the country approvals
<b>product features, product functions, product components / general</b>	
product function / Access Point Mode	Yes
product function / client Mode	Yes
number of SSIDs	8
product function	No
<ul style="list-style-type: none"> <li>iPCF Access Point</li> <li>iPCF-2 access point</li> </ul>	Yes; iPCF-2 is not compatible with iPCF. See documentation for function description.
<ul style="list-style-type: none"> <li>iPCF client</li> <li>iPCF-2 client</li> </ul>	No Yes; iPCF-2 is not compatible with iPCF. See documentation for function

	description.
product function / iPRP	Yes
<b>product functions / management, configuration, engineering</b>	
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
<b>product functions / diagnostics</b>	
product function	
• PROFINET IO diagnosis	Yes
• SysLog	Yes
protocol / is supported	
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes
<b>product functions / VLAN</b>	
product function	
• function VLAN with IWLAN	Yes
number of VLANs / maximum	24
<b>product functions / DHCP</b>	
product function	
• DHCP client	Yes
<b>product functions / redundancy</b>	
protocol / is supported	
• STP/RSTP	Yes
• MSTP	Yes
• RSTP	Yes
product function	
• redundancy procedure MSTP	Yes
<b>product functions / security</b>	
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	

<ul style="list-style-type: none"> <li>with SSL</li> </ul>	4096 bit
<b>product functions / time</b>	
protocol / is supported	
<ul style="list-style-type: none"> <li>NTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>SNTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>SIMATIC time synchronization (SIMATIC Time)</li> </ul>	Yes
<b>standards, specifications, approvals</b>	
certificate of suitability	
<ul style="list-style-type: none"> <li>EC Declaration of Conformity</li> </ul>	Yes
<ul style="list-style-type: none"> <li>CE marking</li> </ul>	Yes
<ul style="list-style-type: none"> <li>E1 approval</li> </ul>	Yes
<ul style="list-style-type: none"> <li>railway application in accordance with EN 50155</li> </ul>	Yes
<ul style="list-style-type: none"> <li>railway application in accordance with EN 50121-4</li> </ul>	Yes
<ul style="list-style-type: none"> <li>fire protection in accordance with EN 45545-2</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af</li> </ul>	Yes
standard for wireless communication	
<ul style="list-style-type: none"> <li>IEEE 802.11a</li> </ul>	Yes
<ul style="list-style-type: none"> <li>IEEE 802.11b</li> </ul>	Yes
<ul style="list-style-type: none"> <li>IEEE 802.11e</li> </ul>	Yes
<ul style="list-style-type: none"> <li>IEEE 802.11g</li> </ul>	Yes
<ul style="list-style-type: none"> <li>IEEE 802.11h</li> </ul>	Yes
<ul style="list-style-type: none"> <li>IEEE 802.11i</li> </ul>	Yes
<ul style="list-style-type: none"> <li>IEEE 802.11n</li> </ul>	Yes
<ul style="list-style-type: none"> <li>IEEE 802.11ac</li> </ul>	Yes
<ul style="list-style-type: none"> <li>IEEE 802.11ax</li> </ul>	Yes
<ul style="list-style-type: none"> <li>IEEE 802.11r</li> </ul>	Yes
wireless approval	You will find the current list of countries at: <a href="http://www.siemens.com/wireless-approvals">www.siemens.com/wireless-approvals</a> or directly on the device
MTBF	24 a
<ul style="list-style-type: none"> <li>reference temperature</li> </ul>	40 °C
reference code	
<ul style="list-style-type: none"> <li>according to IEC 81346-2:2019</li> </ul>	KFE
<b>standards, specifications, approvals / hazardous environments</b>	
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"> <li>from CSA and UL</li> </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
<b>standards, specifications, approvals / Environmental Product Declaration</b>	
Environmental Product Declaration	Yes
global warming potential [CO2 eq]	
<ul style="list-style-type: none"> <li>total</li> </ul>	394.89 kg
<ul style="list-style-type: none"> <li>during manufacturing</li> </ul>	33.7 kg
<ul style="list-style-type: none"> <li>during operation</li> </ul>	361 kg
<ul style="list-style-type: none"> <li>after end of life</li> </ul>	0.19 kg
<b>further information / internet links</b>	
internet link	
<ul style="list-style-type: none"> <li>to website: Selection guide for cables and connectors</li> </ul>	<a href="https://support.industry.siemens.com/cs/ww/en/view/109766358">https://support.industry.siemens.com/cs/ww/en/view/109766358</a>
<ul style="list-style-type: none"> <li>to web page: selection aid TIA Selection Tool</li> </ul>	<a href="https://www.siemens.com/tstcloud">https://www.siemens.com/tstcloud</a>
<ul style="list-style-type: none"> <li>to web page: WLAN country approval</li> </ul>	<a href="https://www.siemens.com/wireless-approvals">https://www.siemens.com/wireless-approvals</a>
<ul style="list-style-type: none"> <li>to the website: IWLAN</li> </ul>	<a href="https://www.siemens.com/iwlan">https://www.siemens.com/iwlan</a>
<ul style="list-style-type: none"> <li>to website: Industrial communication</li> </ul>	<a href="https://www.siemens.com/simatic-net">https://www.siemens.com/simatic-net</a>
<ul style="list-style-type: none"> <li>to web page: SiePortal</li> </ul>	<a href="https://sieportal.siemens.com/">https://sieportal.siemens.com/</a>
<ul style="list-style-type: none"> <li>to website: Image database</li> </ul>	<a href="https://www.automation.siemens.com/bilddb">https://www.automation.siemens.com/bilddb</a>
<ul style="list-style-type: none"> <li>to website: CAX-Download-Manager</li> </ul>	<a href="https://www.siemens.com/cax">https://www.siemens.com/cax</a>
<ul style="list-style-type: none"> <li>to website: Industry Online Support</li> </ul>	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>
<b>security information</b>	
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

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## Approvals / Certificates

### General Product Approval



[Declaration of Conformity](#)



[Manufacturer Declaration](#)

[China RoHS](#)



### General Product Approval

### For use in hazardous locations



[Type Examination Certificate](#)



[CCC-Ex](#)



### Radio Equipment Type Approval Certificate

### Environment

[Miscellaneous](#)

[KC](#)



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