



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 Mbit/s (gross) per radio, 1x 10/100/1000 Mbit/s 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, operation outside of USA/Israel scope of delivery: manuals on DVD, German/English, sealing caps for connections.

transfer rate	
transfer rate	
<ul style="list-style-type: none"> <li>with WLAN / maximum</li> <li>for Industrial Ethernet</li> </ul>	1201 Mbit/s 10, 100, 1000 Mbit/s
transfer rate / for Industrial Ethernet	
<ul style="list-style-type: none"> <li>minimum</li> <li>maximum</li> </ul>	10 Mbit/s 1000 Mbit/s
interfaces	
number of electrical/optical connections / for gigabit Ethernet / maximum	1
number of electrical connections	
<ul style="list-style-type: none"> <li>for network components or terminal equipment</li> <li>for power supply</li> <li>for redundant voltage supply</li> </ul>	1 1 1
type of electrical connection	
<ul style="list-style-type: none"> <li>for network components or terminal equipment</li> <li>for redundant voltage supply</li> </ul>	M12 interface (8-pole, X-coded), PoE M12 interface (4-pin, L-coded)
design of the removable storage	
<ul style="list-style-type: none"> <li>CLP</li> <li>CLP iFeatures</li> </ul>	Yes Yes
memory	
design of the removable storage	
<ul style="list-style-type: none"> <li>CLP</li> <li>CLP iFeatures</li> </ul>	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)
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	0.008 A

30 V / maximum	
<b>supply voltage, current consumption, power loss</b>	
type of voltage / of the supply voltage	Redundant 24 V DC Power Supply, M12, L-coded
supply voltage <ul style="list-style-type: none"> <li>from Power-over-Ethernet acc. to IEEE802.3at for type 1 and IEEE802.3af</li> </ul>	48 V
consumed current <ul style="list-style-type: none"> <li>at DC / at 24 V / typical</li> <li>with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical</li> </ul>	0.55 A 0.27 A
power loss [W] <ul style="list-style-type: none"> <li>at DC / at 24 V / typical</li> <li>with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical</li> </ul>	13.2 W 12.96 W
<b>supply voltage / 1</b> <ul style="list-style-type: none"> <li>from M12 power Connector (L-coded) for redundant voltage supply</li> </ul>	24 V
<b>supply voltage / 1 / rated value</b> <ul style="list-style-type: none"> <li>type of voltage / 1 / of the supply voltage</li> </ul>	24 V DC
<b>supply voltage / 2</b> <ul style="list-style-type: none"> <li>from M12 power Connector (L-coded) for redundant voltage supply</li> </ul>	24 V
<b>supply voltage / 2 / rated value</b> <ul style="list-style-type: none"> <li>type of voltage / 2 / of the supply voltage</li> </ul>	24 V DC
<b>supply voltage / 3 / rated value</b>	48 V
<b>ambient conditions</b>	
ambient temperature <ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> <li>during transport</li> </ul>	-30 ... +60 °C -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
fastening method <ul style="list-style-type: none"> <li>35 mm top hat DIN rail mounting</li> <li>wall mounting</li> <li>VESA mounting</li> </ul>	Yes Yes Yes
<b>radio frequencies</b>	
operating frequency <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>	2.41 ... 2.48 GHz; depending on the country approvals 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	1
product function <ul style="list-style-type: none"> <li>iPCF Access Point</li> </ul>	No
product function / iPRP	Yes
product function <ul style="list-style-type: none"> <li>automatic selection of the fastest transfer rate</li> </ul>	Yes
<b>product functions / management, configuration, engineering</b>	
product function <ul style="list-style-type: none"> <li>CLI</li> </ul>	Yes

<ul style="list-style-type: none"> <li>• web-based management</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• MIB support</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• TRAPs via email</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• configuration with STEP 7</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• configuration with STEP 7 in the TIA Portal</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• WDS</li> </ul>	No
protocol / is supported	
<ul style="list-style-type: none"> <li>• Address Resolution Protocol (ARP)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• ICMP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Telnet</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• HTTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• HTTPS</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• TFTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• DCP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• LLDP</li> </ul>	Yes
identification & maintenance function	
<ul style="list-style-type: none"> <li>• I&amp;M0 - device-specific information</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• I&amp;M1 – higher level designation/location designation</li> </ul>	Yes
<b>product functions / diagnostics</b>	
product function	
<ul style="list-style-type: none"> <li>• PROFINET IO diagnosis</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SysLog</li> </ul>	Yes
protocol / is supported	
<ul style="list-style-type: none"> <li>• SNMP v1</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SNMP v2</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SNMP v3</li> </ul>	Yes
<b>product functions / VLAN</b>	
product function	
<ul style="list-style-type: none"> <li>• function VLAN with IWLAN</li> </ul>	Yes
number of VLANs / maximum	24
<b>product functions / DHCP</b>	
product function	
<ul style="list-style-type: none"> <li>• DHCP client</li> </ul>	Yes
<b>product functions / redundancy</b>	
protocol / is supported	
<ul style="list-style-type: none"> <li>• STP/RSTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• MSTP</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• RSTP</li> </ul>	Yes
<b>product functions / security</b>	
product function	
<ul style="list-style-type: none"> <li>• management security, ACL-IP based</li> </ul>	No
<ul style="list-style-type: none"> <li>• IEEE 802.1x (radius)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• NAT/NAPT</li> </ul>	No
<ul style="list-style-type: none"> <li>• access protection according to IEEE802.11i</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• WPA/WPA2</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• TKIP/AES</li> </ul>	Yes
protocol / is supported	
<ul style="list-style-type: none"> <li>• SSH</li> </ul>	Yes
<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>• Power-over-Ethernet according IEEE802.3at for</li> </ul>	Yes

type 1 and IEEE802.3af	
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
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

#### further information / internet-Links

Internet-Link	
• to website: TIA Selection Tool	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a>
• to web page: selection aid TIA Selection Tool	<a href="http://www.siemens.com/tia-selection-tool">http://www.siemens.com/tia-selection-tool</a>
• to the website: IWLAN	<a href="http://www.siemens.com/iwlan">http://www.siemens.com/iwlan</a>
• to website: Industry Mall	<a href="https://mall.industry.siemens.com">https://mall.industry.siemens.com</a>
• to website: Information and Download Center	<a href="http://www.siemens.com/industry/infocenter">http://www.siemens.com/industry/infocenter</a>
• to website: Image database	<a href="http://automation.siemens.com/bilddb">http://automation.siemens.com/bilddb</a>
• to website: CAX-Download-Manager	<a href="http://www.siemens.com/cax">http://www.siemens.com/cax</a>
• to website: Industry Online Support	<a href="https://support.industry.siemens.com">https://support.industry.siemens.com</a>

#### 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 <a href="http://www.siemens.com/industrialsecurity">http://www.siemens.com/industrialsecurity</a> . To stay informed about product updates as they occur, sign up for a product-specific newsletter. For more information, visit <a href="http://support.automation.siemens.com">http://support.automation.siemens.com</a> . (V3.4)
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last modified:

2/8/2022 