



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/DQ, A-coded, observe national approvals! Cert ID: MSAX65-W1-M12-E2, operation outside of USA/Israel scope of supply: manuals on DVD, German/English, sealing caps for connections

| transfer rate                                                                                                                                                  |                                                                        |
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| transfer rate                                                                                                                                                  |                                                                        |
| <ul style="list-style-type: none"> <li>with WLAN / maximum</li> <li>for Industrial Ethernet</li> </ul>                                                         | 1201 Mbit/s<br>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<br>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<br>1<br>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<br>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<br>Yes                                                             |
| memory                                                                                                                                                         |                                                                        |
| design of the removable storage                                                                                                                                |                                                                        |
| <ul style="list-style-type: none"> <li>CLP</li> <li>CLP iFeatures</li> </ul>                                                                                   | Yes<br>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<br>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<br>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<br>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<br>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<br>-40 ... +85 °C<br>-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<br>Yes<br>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<br>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                                                                                                          |

|                                                                                                                                                                                                                                                          |                                                      |
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| <ul style="list-style-type: none"> <li>• web-based management</li> <li>• MIB support</li> <li>• TRAPs via email</li> <li>• configuration with STEP 7</li> <li>• configuration with STEP 7 in the TIA Portal</li> <li>• WDS</li> </ul>                    | Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>No                |
| protocol / is supported <ul style="list-style-type: none"> <li>• Address Resolution Protocol (ARP)</li> <li>• ICMP</li> <li>• Telnet</li> <li>• HTTP</li> <li>• HTTPS</li> <li>• TFTP</li> <li>• DCP</li> <li>• LLDP</li> </ul>                          | Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes |
| identification & maintenance function <ul style="list-style-type: none"> <li>• I&amp;M0 - device-specific information</li> <li>• I&amp;M1 – higher level designation/location designation</li> </ul>                                                     | Yes<br>Yes                                           |
| <b>product functions / diagnostics</b>                                                                                                                                                                                                                   |                                                      |
| product function <ul style="list-style-type: none"> <li>• PROFINET IO diagnosis</li> <li>• SysLog</li> </ul>                                                                                                                                             | Yes<br>Yes                                           |
| protocol / is supported <ul style="list-style-type: none"> <li>• SNMP v1</li> <li>• SNMP v2</li> <li>• SNMP v3</li> </ul>                                                                                                                                | Yes<br>Yes<br>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> <li>• MSTP</li> <li>• RSTP</li> </ul>                                                                                                                                     | Yes<br>Yes<br>Yes                                    |
| <b>product functions / security</b>                                                                                                                                                                                                                      |                                                      |
| product function <ul style="list-style-type: none"> <li>• management security, ACL-IP based</li> <li>• IEEE 802.1x (radius)</li> <li>• NAT/NAPT</li> <li>• access protection according to IEEE802.11i</li> <li>• WPA/WPA2</li> <li>• TKIP/AES</li> </ul> | No<br>Yes<br>No<br>Yes<br>Yes<br>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> <li>• SNTP</li> <li>• SIMATIC time synchronization (SIMATIC Time)</li> </ul>                                                                                                   | Yes<br>Yes<br>Yes                                    |
| <b>standards, specifications, approvals</b>                                                                                                                                                                                                              |                                                      |
| certificate of suitability <ul style="list-style-type: none"> <li>• EC Declaration of Conformity</li> <li>• CE marking</li> <li>• E1 approval</li> <li>• Power-over-Ethernet according IEEE802.3at for</li> </ul>                                        | Yes<br>Yes<br>Yes<br>Yes                             |

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|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>further information / internet-Links</b>     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>security information</b>                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 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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