

Product type designation

SCALANCE W1788-2 M12 EEC



IWLAN access point, SCALANCE W1788-2 M12 EEC, 2 radios, 8 N-CON antennas iFeatures support via CLP, IEEE 802.11 a/b/g/h/n/ac, 2.4/5 GHz, gross 1733 Mbit/s per radio, 2x M12 max. 1 Gbit/s, PoE, redundant 24 V DC, M12 A-coded IP65, -40..+75 °C, CLP slot, WPA2/802.11i/e, conformal coating EN 50155, EN 45545, observe national approvals! CERT ID: RAPAC-W2-M12-E4, includes: MPCIE-R1-ABGNAC-U4 Scope of delivery: Manuals on DVD, German/English, M12 sealing caps, for operation outside of USA/Israel

Transfer rate

Transfer rate	
<ul style="list-style-type: none"> with WLAN / maximum for Industrial Ethernet 	1733 Mbit/s 10, 100, 1000 Mbit/s
Transfer rate / for Industrial Ethernet	
<ul style="list-style-type: none"> minimum maximum 	10 Mbit/s 1000 Mbit/s

Interfaces

Number of electrical/optical connections / for network components or terminal equipment / maximum / Note	2
Number of electrical/optical connections / for gigabit Ethernet / maximum	2
Number of electrical connections	
<ul style="list-style-type: none"> for network components or terminal equipment for power supply for redundant voltage supply 	2 1 1
Type of electrical connection	
<ul style="list-style-type: none"> for network components or terminal equipment 	M12 interface (8-pole, X-coded), PoE

<ul style="list-style-type: none"> • for power supply 	M12 interface (4-pole, A-coded)
design of the removable storage	
<ul style="list-style-type: none"> • C-PLUG 	No
<ul style="list-style-type: none"> • KEY-PLUG 	No
<ul style="list-style-type: none"> • CLP 	Yes

Interfaces / wireless

Number of radio cards / permanently installed	2
Transmission mode / for multiple input multiple output (MIMO)	4x4
Number of spatial streams	4
Number of electrical connections / for external antenna(s)	8
Type of electrical connection / for external antenna(s)	N-Connect (socket)
Product feature / external antenna can be mounted directly on device	Yes

Supply voltage, current consumption, power loss

Type of voltage / of the supply voltage	DC
Supply voltage / 1	
<ul style="list-style-type: none"> • from M12 Power Connector (A-coded) for redundant power supply 	16.8 V
Supply voltage / 2	
<ul style="list-style-type: none"> • from M12 Power Connector (A-coded) for redundant power supply 	31.2 V
Supply voltage	
<ul style="list-style-type: none"> • from Power-over-Ethernet acc. to IEEE802.3at for type 2 	48 V
Consumed current	
<ul style="list-style-type: none"> • at DC / at 24 V / typical 	0.7 A
<ul style="list-style-type: none"> • with Power-over-Ethernet according to IEEE802.3at for type 2 / typical 	0.385 A
Power loss [W]	
<ul style="list-style-type: none"> • at DC / at 24 V / typical 	16.8 W
<ul style="list-style-type: none"> • with Power-over-Ethernet according to IEEE802.3at for type 2 / typical 	18.5 W

Ambient conditions

Ambient temperature	
<ul style="list-style-type: none"> • during operation 	-40 ... +75 °C
<ul style="list-style-type: none"> • during storage 	-40 ... +85 °C
<ul style="list-style-type: none"> • 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	258 mm
Height	258 mm
Depth	80 mm
Width / of the enclosure / without antenna	258 mm
Height / of the enclosure / without antenna	258 mm
Depth / of the enclosure / without antenna	80 mm
Net weight	2.7 kg
Product feature / conformal coating	Yes
Mounting type	
• S7-300 rail mounting	Yes
• S7-1500 rail mounting	Yes
• 35 mm DIN rail mounting	Yes
• wall mounting	Yes

Radio frequencies	
Operating frequency	
• for WLAN in 2.4 GHz frequency band	2.41 ... 2.48 GHz
• for WLAN in 5 GHz frequency band	4.9 ... 5.8 GHz

Product features, product functions, product components / general	
Product function / Access Point Mode	Yes
Product function / Client Mode	Yes
Number of SSIDs	16
Product function	
• iPCF Access Point	No
• iPCF client	No
• iPCF-MC Access Point	No
• iPCF-MC client	No
Product function / iREF	No
Product function / iPRP	Yes

Product functions / management, configuration, engineering	
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
• operation with IWLAN controller	No
• forced roaming with IWLAN	Yes
• forced roaming on IP down with IWLAN	Yes
• forced roaming on link down with IWLAN	No

• WDS	Yes
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
Protocol / is supported	
• SNMP v1	Yes
• SNMP v2c	Yes
• SNMP v3	Yes

Product functions / VLAN

Product function	
• function VLAN with IWLAN	Yes

Product functions / DHCP

Product function	
• DHCP client	Yes
• DHCP server	Yes
• DHCP Option 82	Yes

Product functions / redundancy

Protocol / is supported	
• STP/RSTP	Yes
• MSTP	Yes
• RSTP	Yes

Product functions / Security

Product function	
• ACL - MAC-based	No
• Management security, ACL-IP based	Yes
• IEEE 802.1x (radius)	Yes
• NAT/NAPT	No

<ul style="list-style-type: none"> • access protection according to IEEE802.11i 	Yes
<ul style="list-style-type: none"> • WPA/WPA2 	Yes
<ul style="list-style-type: none"> • TKIP/AES 	Yes
Protocol / is supported	
<ul style="list-style-type: none"> • SSH 	Yes
<ul style="list-style-type: none"> • RADIUS 	Yes

Product functions / time

Protocol / is supported	
<ul style="list-style-type: none"> • NTP 	Yes
<ul style="list-style-type: none"> • SNTP 	Yes
<ul style="list-style-type: none"> • SIMATIC time synchronization (SIMATIC Time) 	Yes

Standards, specifications, approvals

Certificate of suitability	
<ul style="list-style-type: none"> • EC declaration of conformity 	Yes
<ul style="list-style-type: none"> • CE marking 	Yes
<ul style="list-style-type: none"> • C-Tick 	Yes
<ul style="list-style-type: none"> • IEC 61850-3 	No
<ul style="list-style-type: none"> • NEMA4X 	No
<ul style="list-style-type: none"> • Power-over-Ethernet according to IEEE802.3at for type 2 	Yes
Standard for wireless communication	
<ul style="list-style-type: none"> • IEEE 802.11a 	Yes
<ul style="list-style-type: none"> • IEEE 802.11b 	Yes
<ul style="list-style-type: none"> • IEEE 802.11e 	Yes
<ul style="list-style-type: none"> • IEEE 802.11g 	Yes
<ul style="list-style-type: none"> • IEEE 802.11h 	Yes
<ul style="list-style-type: none"> • IEEE 802.11i 	Yes
<ul style="list-style-type: none"> • IEEE 802.11n 	Yes
<ul style="list-style-type: none"> • IEEE 802.11ac 	Yes
Wireless approval	You will find the current list of countries at: www.siemens.de/funkzulassungen

accessories

accessories	pre-assembled holder for attachment to a DIN rail
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Further information / Internet-Links

Internet-Link	
<ul style="list-style-type: none"> • to website: TIA Selection Tool 	http://www.siemens.com/tia-selection-tool
<ul style="list-style-type: none"> • to the website: IWLAN 	http://www.siemens.com/iwlan
<ul style="list-style-type: none"> • to website: Industry Mall 	https://mall.industry.siemens.com
<ul style="list-style-type: none"> • to website: Information and Download Center 	http://www.siemens.com/industry/infocenter
<ul style="list-style-type: none"> • to website: Image database 	http://automation.siemens.com/bilddb

- to website: CAx Download Manager
- to website: Industry Online Support

<http://www.siemens.com/cax>

<https://support.industry.siemens.com>

Security information

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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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