

product type designation



W1788-1 M12

IWLAN access point, SCALANCE W1788-1 M12, 1 radio, 4 N-CON antenna port, iFeatures support via CLP, IEEE 802.11a/b/g/h/n/ac, 2.4/5GHz, gross 1733 Mbit/s per radio, 2x M12 max. 1 Gbit/s, PoE, redundant 24 V DC, M12 A-coded IP65, -20..+70°C, CLP slot, WPA2/802.11i/e, observe national approvals! CERT ID: RAPAC-W1-M12-E4, includes: MPCIE-R1-ABGNAC-U4, scope of delivery: 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 for power supply 	M12 interface (8-pole, X-coded), PoE M12 interface (4-pole, A-coded)
design of the removable storage	
<ul style="list-style-type: none"> CLP CLP iFeatures 	Yes Yes

memory

design of the removable storage	
<ul style="list-style-type: none"> CLP CLP iFeatures 	Yes Yes

interfaces / wireless

number of radio cards / permanently installed	1
transmission mode / for multiple input multiple output (MIMO)	4x4
number of spatial streams	4
number of electrical connections / for external antenna(s)	4
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	
<ul style="list-style-type: none"> from Power-over-Ethernet according to IEEE802.3at 	48 V

for type 2	
consumed current	
<ul style="list-style-type: none"> at DC / at 24 V / typical with Power-over-Ethernet according to IEEE802.3at for type 2 / typical 	0.375 A 0.21 A
power loss [W]	
<ul style="list-style-type: none"> at DC / at 24 V / typical with Power-over-Ethernet according to IEEE802.3at for type 2 / typical 	10.1 W 9 W
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
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> during operation during storage during transport 	-20 ... +70 °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	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
fastening method	Accessories are required for wall mounting and mounting on a mounting rail.
<ul style="list-style-type: none"> S7-300 rail mounting S7-1500 rail mounting 35 mm top hat DIN rail mounting wall mounting 	Yes 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 client iPCF-MC Access Point iPCF-MC client 	No No No No
product function / iREF	No
product function / iPRP	Yes
product functions / management, configuration, engineering	
product function	
<ul style="list-style-type: none"> CLI web-based management MIB support TRAPs via email configuration with STEP 7 configuration with STEP 7 in the TIA Portal operation with IWLAN controller 	Yes Yes Yes Yes Yes Yes No

<ul style="list-style-type: none"> • forced roaming with IWLAN 	Yes
<ul style="list-style-type: none"> • forced roaming on IP down with IWLAN 	Yes
<ul style="list-style-type: none"> • forced roaming on link down with IWLAN 	No
<ul style="list-style-type: none"> • WDS 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • Address Resolution Protocol (ARP) 	Yes
<ul style="list-style-type: none"> • ICMP 	Yes
<ul style="list-style-type: none"> • Telnet 	Yes
<ul style="list-style-type: none"> • HTTP 	Yes
<ul style="list-style-type: none"> • HTTPS 	Yes
<ul style="list-style-type: none"> • TFTP 	Yes
<ul style="list-style-type: none"> • DCP 	Yes
<ul style="list-style-type: none"> • LLDP 	Yes
identification & maintenance function	
<ul style="list-style-type: none"> • I&M0 - device-specific information 	Yes
<ul style="list-style-type: none"> • I&M1 – higher level designation/location designation 	Yes
product functions / diagnostics	
product function	
<ul style="list-style-type: none"> • PROFINET IO diagnosis 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • SNMP v1 	Yes
<ul style="list-style-type: none"> • SNMP v2c 	Yes
<ul style="list-style-type: none"> • SNMP v3 	Yes
product functions / VLAN	
product function	
<ul style="list-style-type: none"> • function VLAN with IWLAN 	Yes
product functions / DHCP	
product function	
<ul style="list-style-type: none"> • DHCP client 	Yes
<ul style="list-style-type: none"> • DHCP server 	Yes
<ul style="list-style-type: none"> • DHCP Option 82 	Yes
product functions / redundancy	
protocol / is supported	
<ul style="list-style-type: none"> • STP/RSTP 	Yes
<ul style="list-style-type: none"> • MSTP 	Yes
<ul style="list-style-type: none"> • RSTP 	Yes
product functions / security	
product function	
<ul style="list-style-type: none"> • ACL - MAC-based 	No
<ul style="list-style-type: none"> • management security, ACL-IP based 	Yes
<ul style="list-style-type: none"> • IEEE 802.1x (radius) 	Yes
<ul style="list-style-type: none"> • 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	
standard	
<ul style="list-style-type: none"> • for FM 	FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4
<ul style="list-style-type: none"> • for safety / from CSA and UL 	IEC 62368-1
certificate of suitability	

<ul style="list-style-type: none"> • EC Declaration of Conformity • CE marking • C-Tick • E1 approval • IEC 61850-3 • Power-over-Ethernet according to IEEE802.3at for type 2 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>Yes</p>
<p>standard for wireless communication</p> <ul style="list-style-type: none"> • IEEE 802.11a • IEEE 802.11b • IEEE 802.11e • IEEE 802.11g • IEEE 802.11h • IEEE 802.11i • IEEE 802.11n • IEEE 802.11ac 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
<p>wireless approval</p>	<p>You will find the current list of countries at: www.siemens.de/funkzulassungen</p>
<p>standards, specifications, approvals / hazardous environments</p>	
<p>standard / for hazardous zone</p> <ul style="list-style-type: none"> • from CSA and UL 	<p>EN IEC 60079-0 : 2018, EN60079-7:2015 + A1 : 2018; II 3 G Ex ec IIC T4 Gc</p> <p>UL121201, CAN/CSA C22.2 No.213, CL. 1, Div. 2, GP. A, B, C, D, T4 / CL. 1, Zone 2, GP IIC T4</p>
<p>certificate of suitability / CCC / for hazardous zone according to GB standard</p>	<p>Yes</p>
<p>accessories</p>	
<p>accessories</p>	<p>pre-assembled holder for attachment to a DIN rail</p>
<p>further information / internet-Links</p>	
<p>Internet-Link</p> <ul style="list-style-type: none"> • to website: TIA Selection Tool • to web page: selection aid TIA Selection Tool • to the website: IWLAN • to website: Industry Mall • to website: Information and Download Center • to website: Image database • to website: CAx-Download-Manager • to website: Industry Online Support 	<p>http://www.siemens.com/tia-selection-tool</p> <p>http://www.siemens.com/tia-selection-tool</p> <p>http://www.siemens.com/iwlan</p> <p>https://mall.industry.siemens.com</p> <p>http://www.siemens.com/industry/infocenter</p> <p>http://automation.siemens.com/bilddb</p> <p>http://www.siemens.com/cax</p> <p>https://support.industry.siemens.com</p>
<p>security information</p>	
<p>security information</p>	<p>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)</p>

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