

product type designation



W1788-2 M12

IWLAN access point, SCALANCE W1788-2 M12, 2 radios, 8 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-W2-M12-E4, includes: MPCIE-R1-ABGNAC-U4, scope of delivery: for operation outside of USA/Israel

transfer rate

transfer rate	
• with WLAN / maximum	1733 Mbit/s
• for Industrial Ethernet	10, 100, 1000 Mbit/s
transfer rate / for Industrial Ethernet	
• minimum	10 Mbit/s
• maximum	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	
• for network components or terminal equipment	2
• 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 power supply	M12 interface (4-pole, A-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)	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	
• from Power-over-Ethernet according to IEEE802.3at for type 2	48 V
consumed current	
• at DC / at 24 V / typical	0.7 A
• 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 • with Power-over-Ethernet according to IEEE802.3at for type 2 / typical 	16.8 W 18.5 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
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	16
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 • forced roaming with IWLAN • forced roaming on IP down with IWLAN • forced roaming on link down with IWLAN • WDS 	Yes Yes Yes Yes Yes Yes No Yes Yes No Yes
protocol / is supported	
<ul style="list-style-type: none"> • Address Resolution Protocol (ARP) • ICMP • Telnet • HTTP • HTTPS 	Yes Yes Yes Yes Yes

<ul style="list-style-type: none"> • TFTP • DCP • LLDP 	Yes
identification & maintenance function	
<ul style="list-style-type: none"> • I&M0 - device-specific information • I&M1 - higher level designation/location designation 	Yes
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
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 • SNMP v2c • SNMP v3 	Yes
	Yes
	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 • DHCP server • DHCP Option 82 	Yes
	Yes
	Yes
product functions / redundancy	
protocol / is supported	
<ul style="list-style-type: none"> • STP/RSTP • MSTP • RSTP 	Yes
	Yes
	Yes
product functions / security	
product function	
<ul style="list-style-type: none"> • ACL - MAC-based • management security, ACL-IP based • IEEE 802.1x (radius) • NAT/NAPT • access protection according to IEEE802.11i • WPA/WPA2 • TKIP/AES 	No
	Yes
	Yes
	No
	Yes
	Yes
	Yes
protocol / is supported	
<ul style="list-style-type: none"> • SSH • RADIUS 	Yes
	Yes
product functions / time	
protocol / is supported	
<ul style="list-style-type: none"> • NTP • SNTP • SIMATIC time synchronization (SIMATIC Time) 	Yes
	Yes
	Yes
standards, specifications, approvals	
standard	
<ul style="list-style-type: none"> • for FM • for safety / from CSA and UL 	FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4, FM16US0205X
	IEC 62368-1, UL 60950-1 E115352-A6001
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 	Yes
	Yes
	Yes
	Yes
	No
	Yes
standard for wireless communication	
<ul style="list-style-type: none"> • IEEE 802.11a • IEEE 802.11b • IEEE 802.11e • IEEE 802.11g 	Yes
	Yes
	Yes
	Yes

<ul style="list-style-type: none"> • IEEE 802.11h • IEEE 802.11i • IEEE 802.11n • IEEE 802.11ac 	Yes
	Yes
	Yes
	Yes
wireless approval	You will find the current list of countries at: www.siemens.de/funkzulassungen
reference code	
<ul style="list-style-type: none"> • according to IEC 81346-2:2019 	KFE
standards, specifications, approvals / hazardous environments	
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"> • from CSA and 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, E240480
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes; GB3836.1, GB3836.8
<ul style="list-style-type: none"> • as marking 	Ex nA IIC T4 Gc
accessories	
accessories	pre-assembled holder for attachment to a DIN rail
further information / internet links	
internet link	
<ul style="list-style-type: none"> • to website: Selection guide for cables and connectors • to web page: selection aid TIA Selection Tool • to web page: WLAN country approval • to the website: IWLAN • to website: Industrial communication • to web page: SiePortal • to website: Image database • to website: CAX-Download-Manager • to website: Industry Online Support 	https://support.industry.siemens.com/cs/ww/en/view/109766358 https://www.siemens.com/tstcloud https://www.siemens.com/wireless-approvals https://www.siemens.com/iwlan https://www.siemens.com/simatic-net https://sieportal.siemens.com/ https://www.automation.siemens.com/bilddb https://www.siemens.com/cax https://support.industry.siemens.com
security information	
security information	<p>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 for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)</p>

Approvals / Certificates				
General Product Approval			For use in hazardous locations	
	Declaration of Conformity			
EG-Konf.		UL	RCM	IECEX
For use in hazardous locations		Radio Equipment Type Approval Certificate		Environment
CCC-Ex		Miscellaneous	Miscellaneous	Confirmation
	UL			

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