

product type designation



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, 2.4/5GHz, 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: M12 sealing caps, for operation outside of USA/Israel

transfer rate	
transfer rate	
<ul style="list-style-type: none"> with WLAN / maximum 	1733 Mbit/s
<ul style="list-style-type: none"> for Industrial Ethernet 	10, 100, 1000 Mbit/s
transfer rate / for Industrial Ethernet	
<ul style="list-style-type: none"> minimum 	10 Mbit/s
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> for network components or terminal equipment 	2
<ul style="list-style-type: none"> for power supply 	1
<ul style="list-style-type: none"> for redundant voltage supply 	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"> CLP 	Yes
<ul style="list-style-type: none"> CLP iFeatures 	Yes
memory	
design of the removable storage	
<ul style="list-style-type: none"> CLP 	Yes
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> from Power-over-Ethernet according to IEEE802.3at for type 2 	48 V
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 	0.7 A 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 	-40 ... +75 °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
product feature / conformal coating	Yes
fastening method <ul style="list-style-type: none"> • S7-300 rail mounting • S7-1500 rail mounting • 35 mm top hat DIN rail mounting • wall mounting 	Accessories are required for wall mounting and mounting on a mounting rail. 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 	Yes Yes Yes Yes Yes Yes No Yes Yes No

<ul style="list-style-type: none"> • WDS 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • Address Resolution Protocol (ARP) • ICMP • Telnet • HTTP • HTTPS • TFTP • DCP • LLDP 	Yes Yes Yes Yes Yes Yes Yes Yes
identification & maintenance function	
<ul style="list-style-type: none"> • I&M0 - device-specific information • I&M1 - higher level designation/location designation 	Yes 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 • 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 	FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4, FM16US0205X
certificate of suitability	
<ul style="list-style-type: none"> • EC Declaration of Conformity • CE marking • C-Tick • E1 approval • railway application in accordance with EN 50155 • railway application in accordance with EN 50121-4 	Yes Yes Yes Yes Yes Yes

<ul style="list-style-type: none"> • fire protection in accordance with EN 45545-2 	Yes
<ul style="list-style-type: none"> • IEC 61850-3 	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
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
<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: TIA Selection Tool 	http://www.siemens.com/tia-selection-tool
<ul style="list-style-type: none"> • to web page: selection aid 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
<ul style="list-style-type: none"> • to website: CAx-Download-Manager 	http://www.siemens.com/cax
<ul style="list-style-type: none"> • to website: Industry Online Support 	https://support.industry.siemens.com
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 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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