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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	
● with WLAN / maximum	1733 Mbit/s
● for Industrial Ethernet	10, 100, 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]	
● at DC / at 24 V / typical	16.8 W
● with Power-over-Ethernet according to IEEE802.3at for type 2 / typical	18.5 W

6/13/2025

supply voltage / 1	
● from M12 Power Connector (A-coded) for redundant power supply	16.8 V
supply voltage / 2	
● from M12 Power Connector (A-coded) for redundant power supply	31.2 V
ambient conditions	
ambient temperature	
● during operation	-40 ... +75 °C
● during storage	-40 ... +85 °C
● 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
fastening method	Accessories are required for wall mounting and mounting on a mounting rail.
● 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; depending on the country approvals
● for WLAN in 5 GHz frequency band	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	
● 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

6/13/2025

● 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 function / is supported / identification link	Yes; acc. to IEC 61406-1:2022

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
● access protection according to IEEE802.11i	Yes
● WPA/WPA2	Yes
● TKIP/AES	Yes
protocol / is supported	
● SSH	Yes
● RADIUS	Yes

product functions / time

protocol / is supported	
● NTP	Yes
● SNTP	Yes
● SIMATIC time synchronization (SIMATIC Time)	Yes

standards, specifications, approvals

standard	
● for FM	FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4, FM16US0205X
● for safety / from CSA and UL	IEC 62368-1, UL 60950-1 E115352-A6001
certificate of suitability	
● EC Declaration of Conformity	Yes
● CE marking	Yes
● C-Tick	Yes
● E1 approval	Yes
● railway application in accordance with EN 50155	Yes
● railway application in accordance with EN 50121-4	Yes
● fire protection in accordance with EN 45545-2	Yes
● IEC 61850-3	No
● Power-over-Ethernet according to IEEE802.3at for type 2	Yes
standard for wireless communication	

6/13/2025

● 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
wireless approval	You will find the current list of countries at: www.siemens.de/funkzulassungen
reference code	
● 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
● 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
● as marking	Ex nA IIC T4 Gc

accessories

accessories	pre-assembled holder for attachment to a DIN rail

further information / internet links

internet link	
● to website: Selection guide for cables and connectors	https://support.industry.siemens.com/cs/ww/en/view/109766358
● to web page: selection aid TIA Selection Tool	https://www.siemens.com/tstcloud
● to web page: WLAN country approval	https://www.siemens.com/wireless-approvals
● to the website: IWLAN	https://www.siemens.com/iwlan
● to website: Industrial communication	https://www.siemens.com/simatic-net
● to web page: SiePortal	https://sieportal.siemens.com/
● to website: Image database	https://www.automation.siemens.com/bilddb
● to website: CAx-Download-Manager	https://www.siemens.com/cax
● to website: Industry Online Support	https://support.industry.siemens.com

security information

security information	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)

Approvals / Certificates

General Product Approval

CE
EG-Konf.

Declaration of Conformity

EAC

Manufacturer Declaration

China RoHS

UKCA

General Product Approval	**For use in hazardous locations**

UL
UL

RCM

Ex
ATEX

IECEx
IECEx

CCC-Ex

UL
UL

Radio Equipment Type Approval Certificate	Railway

[Miscellaneous](#)   [Miscellaneous](#)   [Confirmation](#)

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6/13/2025