



IWLAN access point, SCALANCE W1788-2IA M12, 2 radios, 8 internal antennas, iFeatures support via CLP, IEEE 802.11a/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, -20..+70 °C, CLP slot, WPA2/802.11i/e, observe national approvals! CERT ID: RAPAC-W2-M12-I4, includes: MPCIE-R1-ABGNAC-U4 Scope of delivery: Manuals on DVD, German/English, 1x terminal block; 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"> • 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 internal antennas	8
Type of electrical connection / for external antenna(s)	N-Connect (socket)
Product feature / external antenna can be mounted directly on device	No

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 	-20 ... +70 °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
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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
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; 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
• 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
• 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
Certificate of suitability	
• EC declaration of conformity	Yes
• CE marking	Yes
• C-Tick	Yes
• E1 approval	Yes
• IEC 61850-3	No
• Power-over-Ethernet according to IEEE802.3at for type 2	Yes
Standard for wireless communication	
• 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

accessories

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

Internet-Link	
• to website: TIA Selection Tool	http://www.siemens.com/tia-selection-tool
• to the website: IWLAN	http://www.siemens.com/iwlan
• to website: Industry Mall	https://mall.industry.siemens.com
• to website: Information and Download Center	http://www.siemens.com/industry/infocenter
• to website: Image database	http://automation.siemens.com/bilddb
• to website: CAx Download Manager	http://www.siemens.com/cax

Security information

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