

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]	
• 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	
• 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 • 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.
• 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	
• 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	
• 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	
• 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	
• Address Resolution Protocol (ARP) • ICMP • Telnet • HTTP • HTTPS	Yes Yes Yes Yes Yes

• TFTP • DCP • LLDP	Yes
identification & maintenance function	
• I&M0 - device-specific information • I&M1 - higher level designation/location designation	Yes
product functions / diagnostics	
product function	
• PROFINET IO diagnosis	Yes
protocol / is supported	
• SNMP v1 • SNMP v2c • SNMP v3	Yes
product functions / VLAN	
product function	
• function VLAN with IWLAN	Yes
product functions / DHCP	
product function	
• DHCP client • DHCP server • DHCP Option 82	Yes
product functions / redundancy	
protocol / is supported	
• STP/RSTP • MSTP • RSTP	Yes
product functions / security	
product function	
• 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	
• SSH • RADIUS	Yes
	Yes
product functions / time	
protocol / is supported	
• NTP • SNTP • SIMATIC time synchronization (SIMATIC Time)	Yes
	Yes
	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
certificate of suitability	
• 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	
• IEEE 802.11a • IEEE 802.11b • IEEE 802.11e • IEEE 802.11g • IEEE 802.11h • IEEE 802.11i	Yes
	Yes
	Yes
	Yes
	Yes
	Yes

• IEEE 802.11n • IEEE 802.11ac	Yes
wireless approval	Yes
	You will find the current list of countries at: www.siemens.de/funkzulassungen
standards, specifications, approvals / hazardous environments	
standard / for hazardous zone • from CSA and UL	EN IEC 60079-0 : 2018, EN60079-7:2015 + A1 : 2018; II 3 G Ex ec IIC T4 Gc 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 • as marking	Yes; GB3836.1, GB3836.8 Ex nA IIC T4 Gc
accessories	
accessories	pre-assembled holder for attachment to a DIN rail
further information / internet links	
internet link • 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	http://www.siemens.com/tia-selection-tool http://www.siemens.com/tia-selection-tool http://www.siemens.com/iwlan https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter http://automation.siemens.com/bilddb http://www.siemens.com/cax 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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