

product type designation



W788C-2 M12 EEC Contr.-Based

***** spare part ***** IWLAN access point, SCALANCE W788C-2 M12 EEC, 2 radios, for operation on IWLAN controller 6 N-CON. antenna port, IEEE 802.11a/b/g/h/n, 2.4/5GHz, gross 450 Mbit/s per radio, 1x M12 max. 1 Gbit/s, PoE, redundant 24 V DC, M12 A-coded IP65, -40...+70 °C, WPA2/802.11i/e, conformal coating, EN 50155 observe national approval CERT ID: RAPN-W2-M12-E3, scope of delivery: manuals on CD-ROM German/English M12 sealing caps,

transfer rate

transfer rate	
<ul style="list-style-type: none"> with WLAN / maximum 	450 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 connections	
<ul style="list-style-type: none"> for network components or terminal equipment 	1
<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"> C-PLUG 	No
<ul style="list-style-type: none"> KEY-PLUG 	No

memory

design of the removable storage	
<ul style="list-style-type: none"> C-PLUG 	No
<ul style="list-style-type: none"> KEY-PLUG 	No

interfaces / wireless

number of radio cards / permanently installed	2
transmission mode / for multiple input multiple output (MIMO)	3x3
number of spatial streams	3
number of electrical connections / for external antenna(s)	6
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 1 and IEEE802.3af 	48 V
<ul style="list-style-type: none"> from Power-over-Ethernet according to IEEE802.3at for type 2 	50 V
consumed current	
<ul style="list-style-type: none"> at DC / at 24 V / typical 	0.63 A

<ul style="list-style-type: none"> with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical 	0.22 A
<ul style="list-style-type: none"> with Power-over-Ethernet according to IEEE802.3at for type 2 / typical 	0.3 A
power loss [W]	
<ul style="list-style-type: none"> at DC / at 24 V / typical 	15 W
<ul style="list-style-type: none"> with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical 	10.7 W
<ul style="list-style-type: none"> with Power-over-Ethernet according to IEEE802.3at for type 2 / typical 	15 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 	-40 ... +74 °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	100 %
ambient condition / for operation	When used under hazardous conditions (Zone 2), the SCALANCE W788-x or W748-x product must be installed in an enclosure. To comply with EN 50021, this enclosure must meet the requirements of at least IP 54 in compliance with EN 60529.
protection class IP	IP65
design, dimensions and weights	
width / of the enclosure / without antenna	200 mm
height / of the enclosure / without antenna	176 mm
depth / of the enclosure / without antenna	79 mm
net weight	1.7 kg
product feature / conformal coating	Yes
fastening method	For 35 mm DIN rail mounting an additional mounting adapter is required
<ul style="list-style-type: none"> S7-300 rail mounting 	Yes
<ul style="list-style-type: none"> S7-1500 rail mounting 	Yes
<ul style="list-style-type: none"> wall mounting 	Yes
radio frequencies	
operating frequency	
<ul style="list-style-type: none"> for WLAN in 2.4 GHz frequency band 	2.41 ... 2.48 GHz; depending on the country approvals
<ul style="list-style-type: none"> 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	No
number of SSIDs	16
product functions / management, configuration, engineering	
product function	
<ul style="list-style-type: none"> operation with IWLAN controller 	Yes
<ul style="list-style-type: none"> operation with Enterasys WLAN controller 	Yes
product functions / DHCP	
product function	
<ul style="list-style-type: none"> DHCP client 	Yes
product functions / time	
protocol / is supported	
<ul style="list-style-type: none"> SIMATIC time synchronization (SIMATIC Time) 	No
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
<ul style="list-style-type: none"> for safety / from CSA and UL 	UL 60950-1, CSA C22.2 No. 60950-1
certificate of suitability	
<ul style="list-style-type: none"> EC Declaration of Conformity 	Yes
<ul style="list-style-type: none"> 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
• NEMA TS2	Yes
• IEC 61375	No
• IEC 61850-3	No
• NEMA4X	No
• Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af	Yes
• 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
wireless approval	You will find the current list of countries at: www.siemens.de/funkzulassungen

standards, specifications, approvals / marine classification

Marine classification association	
• American Bureau of Shipping Europe Ltd. (ABS)	Yes
• French marine classification society (BV)	Yes
• DNV GL	Yes
• Korean Register of Shipping (KRS)	Yes
• Lloyds Register of Shipping (LRS)	Yes
• Nippon Kaiji Kyokai (NK)	Yes
• Polski Rejestr Statkow (PRS)	Yes
• Royal Institution of Naval Architects (RINA)	Yes

standards, specifications, approvals / hazardous environments

standard / for hazardous zone	EN 60079-15:2005, EN 60079-0:2006, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X
• from CSA and UL	ANSI/ISA 12.12.01-2013, CAN/CSA C22.2 No.213-M1987, CL. 1, Div. 2, GP. A,B,C,D, T4 / CL. 1, Zone 2, GP IIC

further information / internet-Links

Internet-Link	
• to website: TIA Selection Tool	http://www.siemens.com/tia-selection-tool
• to web page: selection aid 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
• 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)
----------------------	---

last modified:

1/21/2021 