

product type designation



W786-2IA RJ45

IWLAN Access Point, SCALANCE W786-2IA RJ45, 2 radios, 6 internal antennas, iFeatures support via key plug, IEEE 802.11a/b/g/h/n, 2.4/5GHz, gross 450 Mbit/s per radio, 1x RJ45 max. 1 Gbit/s, PoE, redundant 24 V DC, terminal block, 110 - 230 V AC via PS791-2AC IP65, -40..+60 °C, plug slot, WPA2/802.11i/e, observe national approvals! CERT ID: EAPN-W2-RJ-I3, includes: MPCIE-R1-ABGN-U3, scope of delivery: Manuals on CD-ROM, 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 	450 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 connections	
<ul style="list-style-type: none"> for network components or terminal equipment for power supply for redundant voltage supply 	1 1 1
type of electrical connection	
<ul style="list-style-type: none"> for network components or terminal equipment for power supply 	RJ45 socket 2-pole connector (24 V DC) or optionally available power supply adapter (4-pole 24 V DC or 3-pole 110 to 230 V AC)
design of the removable storage	
<ul style="list-style-type: none"> C-PLUG KEY-PLUG 	Yes Yes
memory	
design of the removable storage	
<ul style="list-style-type: none"> C-PLUG KEY-PLUG 	Yes Yes
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 internal antennas	6
antenna gain compared to spherical radiator / of the WLAN antenna	
<ul style="list-style-type: none"> in the 2.4 GHz frequency band in the 5 GHz frequency band 	3 dB 4 dB
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 from Power-over-Ethernet according to IEEE802.3at 	48 V 50 V

for type 2	
<ul style="list-style-type: none"> from optional integrable power supply <ul style="list-style-type: none"> at AC at DC 	100 ... 240 V 12 ... 24 V
consumed current	
<ul style="list-style-type: none"> at DC / at 24 V / typical at AC / at 230 V / typical with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical 	0.63 A 0.07 A 0.22 A
power loss [W]	
<ul style="list-style-type: none"> at DC / at 24 V / typical at AC / at 230 V / typical with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical 	15 W 15 W 15 W
supply voltage / 1	
<ul style="list-style-type: none"> from terminal block 	19.2 V
supply voltage / 2	
<ul style="list-style-type: none"> from terminal block 	28.8 V
ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> during operation during storage during transport 	-40 ... +60 °C -40 ... +85 °C -40 ... +70 °C
relative humidity / at 25 °C / without condensation / during operation / maximum	100 %
ambient condition / for operation	When using the 100 - 240 V AC power supply, an operating temperature of -40 °C to +60 °C is permissible
protection class IP	IP65
design, dimensions and weights	
width / of the enclosure / without antenna	251 mm
height / of the enclosure / without antenna	251 mm
depth / of the enclosure / without antenna	72 mm
net weight	2.24 kg
fastening method	For mast mounting, 35 mm DIN rail mounting and S7-300 rail mounting, an additional support plate is required
<ul style="list-style-type: none"> S7-300 rail mounting S7-1500 rail mounting 35 mm top hat DIN rail mounting wall mounting 	Yes No 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 	Yes; Only in combination with the 'KEY-PLUG W780 iFeatures' Yes; Only in combination with the 'KEY-PLUG W780 iFeatures' or 'KEY-PLUG W740 iFeatures' Yes; Only in combination with the 'KEY-PLUG W780 iFeatures' Yes; Only in combination with 'KEY-PLUG W780 iFeatures' or 'KEY-PLUG W740 iFeatures'
number of iPCF-capable radio modules	2
product function / iREF	Yes; In combination only with 'KEY-PLUG W780 iFeatures'
number of iREF-capable radio modules	2
product function / iPRP	Yes; In combination with the 'KEY-PLUG W780 iFeatures' only
product functions / management, configuration, engineering	
number of manageable IP addresses / in client	8
product function	

<ul style="list-style-type: none"> • CLI 	Yes
<ul style="list-style-type: none"> • web-based management 	Yes
<ul style="list-style-type: none"> • MIB support 	Yes
<ul style="list-style-type: none"> • TRAPs via email 	Yes
<ul style="list-style-type: none"> • configuration with STEP 7 	Yes
<ul style="list-style-type: none"> • configuration with STEP 7 in the TIA Portal 	Yes
<ul style="list-style-type: none"> • operation with IWLAN controller 	No
<ul style="list-style-type: none"> • operation with Enterasys WLAN controller 	No
<ul style="list-style-type: none"> • forced roaming on IP down with IWLAN 	Yes
<ul style="list-style-type: none"> • forced roaming on link down with IWLAN 	Yes
<ul style="list-style-type: none"> • WDS 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • Address Resolution Protocol (ARP) 	Yes
<ul style="list-style-type: none"> • ICMP 	Yes
<ul style="list-style-type: none"> • Telnet 	Yes
<ul style="list-style-type: none"> • HTTP 	Yes
<ul style="list-style-type: none"> • HTTPS 	Yes
<ul style="list-style-type: none"> • TFTP 	Yes
<ul style="list-style-type: none"> • DCP 	Yes
<ul style="list-style-type: none"> • LLDP 	Yes
identification & maintenance function	
<ul style="list-style-type: none"> • I&M0 - device-specific information 	Yes
<ul style="list-style-type: none"> • I&M1 – higher level designation/location designation 	Yes
product functions / diagnostics	
product function	
<ul style="list-style-type: none"> • PROFINET IO diagnosis 	Yes
<ul style="list-style-type: none"> • link check 	No
<ul style="list-style-type: none"> • connection monitoring IP-Alive 	No
<ul style="list-style-type: none"> • localization via Aeroscout 	Yes
<ul style="list-style-type: none"> • SysLog 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • SNMP v1 	Yes
<ul style="list-style-type: none"> • SNMP v2 	Yes
<ul style="list-style-type: none"> • SNMP v3 	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 	Yes
<ul style="list-style-type: none"> • DHCP server 	Yes
<ul style="list-style-type: none"> • DHCP Option 82 	Yes
product functions / redundancy	
protocol / is supported	
<ul style="list-style-type: none"> • STP/RSTP 	Yes
<ul style="list-style-type: none"> • MSTP 	Yes
<ul style="list-style-type: none"> • RSTP 	Yes
product functions / security	
product function	
<ul style="list-style-type: none"> • ACL - MAC-based 	Yes
<ul style="list-style-type: none"> • management security, ACL-IP based 	Yes
<ul style="list-style-type: none"> • IEEE 802.1x (radius) 	Yes
<ul style="list-style-type: none"> • NAT/NAPT 	No
<ul style="list-style-type: none"> • access protection according to IEEE802.11i 	Yes
<ul style="list-style-type: none"> • WPA/WPA2 	Yes
<ul style="list-style-type: none"> • TKIP/AES 	Yes
protocol / is supported	
<ul style="list-style-type: none"> • SSH 	Yes
<ul style="list-style-type: none"> • RADIUS 	Yes

product functions / time	
protocol / is supported	
<ul style="list-style-type: none"> • NTP • Sntp • SIMATIC time synchronization (SIMATIC Time) 	<p>Yes</p> <p>Yes</p> <p>Yes</p>

standards, specifications, approvals	
standard	
<ul style="list-style-type: none"> • for FM • for safety / from CSA and UL 	<p>FM 3611: Class I, Division 2, Groups A,B,C,D, T4 / Class 1, Zone 2, Group IIC, T4</p> <p>UL 60950-1, CSA C22.2 No. 60950-1</p>
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 • NEMA TS2 • IEC 61375 • IEC 61850-3 • NEMA4X • Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af • Power-over-Ethernet according to IEEE802.3at for type 2 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>No</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
standard for wireless communication	
<ul style="list-style-type: none"> • IEEE 802.11a • IEEE 802.11b • IEEE 802.11e • IEEE 802.11g • IEEE 802.11h • IEEE 802.11i • IEEE 802.11n 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
wireless approval	You will find the current list of countries at: www.siemens.de/funkzulassungen

standards, specifications, approvals / marine classification	
Marine classification association	
<ul style="list-style-type: none"> • American Bureau of Shipping Europe Ltd. (ABS) • French marine classification society (BV) • DNV GL • Korean Register of Shipping (KRS) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (NK) • Polski Rejestr Statkow (PRS) • Royal Institution of Naval Architects (RINA) 	<p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

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
<ul style="list-style-type: none"> • 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
certificate of suitability / CCC / for hazardous zone according to GB standard	Yes

accessories	
accessories	24 V DC screw terminal included in scope of delivery

further information / internet-Links	
Internet-Link	
<ul style="list-style-type: none"> • 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 	<p>http://www.siemens.com/tia-selection-tool</p> <p>http://www.siemens.com/tia-selection-tool</p> <p>http://www.siemens.com/iwlan</p> <p>https://mall.industry.siemens.com</p> <p>http://www.siemens.com/industry/infocenter</p>

- to website: Image database
- to website: CAx-Download-Manager
- to website: Industry Online Support

<http://automation.siemens.com/bilddb>

<http://www.siemens.com/cax>

<https://support.industry.siemens.com>

security information

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