

product type designation



W786-2IA RJ45 (USA)

IWLAN access point, SCALANCE W786-2IA RJ45, 2 radios, 6 internal antennas, iFeatures support via KEY-PLUG, IEEE 802.11a/b/g/h/n, 2.4/5 GHz, gross 450 Mbps per radio, 1x RJ45 max. 1 Gbps, PoE, redundant 24 V DC, joint 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 supply: manuals on CD-ROM, German/English, 1x joint block; for operation in the USA.

product brand name

SCALANCE

Technical Product Detail Page

<https://l.siemens.com/1P6GK5786-2HC00-0AB0>

transfer rate

transfer rate

- | | |
|---------------------------|----------------------|
| • with WLAN / maximum | 450 Mbit/s |
| • for Industrial Ethernet | 10, 100, 1000 Mbit/s |

interfaces

number of electrical connections

- | | |
|--|---|
| • for network components or terminal equipment | 1 |
| • for power supply | 1 |
| • for redundant voltage supply | 1 |

type of electrical connection

- | | |
|--|--|
| • for network components or terminal equipment | RJ45 socket |
| • for power supply | 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) |

memory

design of the removable storage

- | | |
|------------|-----|
| • C-PLUG | Yes |
| • KEY-PLUG | 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

- | | |
|---------------------------------|------|
| • in the 2.4 GHz frequency band | 3 dB |
| • in the 5 GHz frequency band | 4 dB |

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 1 and IEEE802.3af | 48 V |
| • from Power-over-Ethernet according to IEEE802.3at for type 2 | 50 V |
| • from optional integrable power supply | |
| — at AC | 100 ... 240 V |
| — at DC | 12 ... 24 V |

consumed current

• 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] • 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 • from terminal block	19.2 V
supply voltage / 2 • from terminal block	28.8 V
ambient conditions	
ambient temperature • 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 • S7-300 rail mounting • S7-1500 rail mounting • 35 mm DIN-rail mounting • wall mounting	For mast mounting, 35 mm DIN rail mounting and S7-300 rail mounting, an additional support plate is required Yes No 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	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 • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7	Yes Yes Yes Yes Yes

• configuration with STEP 7 in the TIA Portal • operation with IWLAN controller • operation with Enterasys WLAN controller • forced roaming on IP down with IWLAN • forced roaming on link down with IWLAN • WDS	Yes No No Yes Yes Yes
protocol / is supported • Address Resolution Protocol (ARP) • ICMP • Telnet • HTTP • HTTPS • TFTP • DCP • LLDP	Yes Yes Yes Yes Yes Yes Yes Yes
identification & maintenance function • I&M0 - device-specific information • I&M1 - higher level designation/location designation	Yes Yes
product function / is supported / identification link	Yes; acc. to IEC 61406-1:2022
product functions / diagnostics	
product function • PROFINET IO diagnosis • link check • connection monitoring IP-Alive • localization via Aeroscout • SysLog	Yes No No Yes Yes
protocol / is supported • SNMP v1 • SNMP v2 • SNMP v3	Yes Yes Yes
product functions / VLAN	
product function • function VLAN with IWLAN	Yes
product functions / DHCP	
product function • DHCP client • DHCP server • DHCP Option 82	Yes Yes Yes
product functions / redundancy	
protocol / is supported • STP/RSTP • MSTP • RSTP	Yes Yes 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	Yes Yes Yes No Yes Yes Yes
protocol / is supported • SSH • RADIUS	Yes Yes
product functions / time	
protocol / is supported • NTP • SNTP	Yes 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	UL 60950-1 E115352, CSA C22.2 No. 60950-1
certificate of suitability	
• EC Declaration of Conformity	Yes
• CE marking	Yes
• C-Tick	Yes
• E1 approval	Yes
• railway application in accordance with EN 50155	No
• railway application in accordance with EN 50121-4	No
• NEMA TS2	No
• IEC 61375	No
• IEC 61850-3	No
• NEMA4X	Yes
• 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	For operation in the USA, you will find more information under: 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 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	24 V DC screw terminal included in scope of delivery
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

security information

security information

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Approvals / Certificates

General Product Approval



[Declaration of Conformity](#)



[Manufacturer Declaration](#)

[China RoHS](#)

[Miscellaneous](#)

General Product Approval

For use in hazardous locations

Radio Equipment Type Approval Certificate

Maritime application

[China RoHS](#)



[CCC-Ex](#)

[Miscellaneous](#)



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