SIEMENS

Data sheet

6GK5786-2FE00-0AB0

product type designation



W786-2 SFP (USA)

IWLAN Access Point SCALANCE W786-2 SFP, 2 radios, 6 R-SMA antenna port, iFeatures support via key plug, IEEE 802.11a/b/g/h/n, 2.4/5GHz gross 450 Mbit/s per radio, 2x SFP 1 Gbit/s switches, redundant 24 V DC, terminal block, 110 - 230 V AC via PS791-2AC IP65, -40..+60 °C, plug slot, Temperature range dependent on SFP WPA2/802.11i/e, observe national approvals! CERT ID: EAPN-W2-SFP-E3, includes: MPCIE-R1-ABGN-U3, scope of delivery: Manuals on CD-ROM, German/English, for operation in the USA

transfer rate	
transfer rate	
with WLAN / maximum	450 Mbit/s
 for Industrial Ethernet 	1000
transfer rate / for Industrial Ethernet	
• minimum	1000 Mbit/s
• maximum	1000 Mbit/s
interfaces	
number of electrical connections	
for power supply	1
 for redundant voltage supply 	0
type of electrical connection	
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)
number of optical interfaces	
for fiber optic cable / at 1000 Mbit/s	2
design of the optical interface	
for fiber optic cable / at 1000 Mbit/s	SFP slot
design of the removable storage	
• C-PLUG	Yes
• KEY-PLUG	Yes
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 electrical connections / for external antenna(s)	6
type of electrical connection / for external antenna(s)	R-SMA (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	
 from optional integrable power supply 	
— at AC	100 240 V

— at DC	12 24 V
supply voltage / 1	
from terminal block	19.2 V
supply voltage / 2	
 from terminal block 	28.8 V
ambient conditions	
ambient temperature	
 during operation 	-40 +60 °C
 during storage 	-40 +85 °C
during transport	-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 $^{\circ}\text{C}$ to +60 $^{\circ}\text{C}$ 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
S7-300 rail mounting	Yes
 S7-1500 rail mounting 	No
 35 mm top hat 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 / Access Point Mode	Yes
product function / Access Point Mode product function / client Mode number of SSIDs product function	Yes Yes 16
product function / Access Point Mode product function / client Mode number of SSIDs product function • iPCF Access Point	Yes Yes 16 Yes; Only in combination with the 'KEY-PLUG W780 iFeatures'
product function / Access Point Mode product function / client Mode number of SSIDs product function • iPCF Access Point • iPCF client	Yes Yes 16 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'
product function / Access Point Mode product function / client Mode number of SSIDs product function • iPCF Access Point • iPCF client • iPCF-MC Access Point	Yes Yes 16 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'
product function / Access Point Mode product function / client Mode number of SSIDs product function • iPCF Access Point • iPCF client • iPCF-MC Access Point • iPCF-MC Client	Yes Yes 16 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'
product function / Access Point Mode product function / client Mode number of SSIDs product function • iPCF Access Point • iPCF-MC Access Point • iPCF-MC client number of iPCF-capable radio modules	Yes Yes 16 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' 2
product function / Access Point Mode product function / client Mode number of SSIDs product function • iPCF Access Point • iPCF-MC Access Point • iPCF-MC Client number of iPCF-capable radio modules product function / iREF	Yes Yes 16 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' 2 No; In combination only with 'KEY-PLUG W780 iFeatures'
product function / Access Point Mode product function / client Mode number of SSIDs product function • iPCF Access Point • iPCF-MC Access Point • iPCF-MC dient number of iPCF-capable radio modules product function / iREF number of iREF-capable radio modules	Yes Yes 16 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' 2 No; In combination only with 'KEY-PLUG W780 iFeatures' 2
product function / Access Point Mode product function / client Mode number of SSIDs product function • iPCF Access Point • iPCF-dient • iPCF-MC Access Point • iPCF-MC dient number of iPCF-capable radio modules product function / iREF number of iREF-capable radio modules product function / iPRP	Yes Yes 16 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' No; In combination only with 'KEY-PLUG W780 iFeatures' Yes; In combination with the 'KEY-PLUG W780 iFeatures' only
product function / Access Point Mode product function / client Mode number of SSIDs product function	Yes Yes 16 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' 2 No; In combination only with 'KEY-PLUG W780 iFeatures' 2 Yes; In combination with the 'KEY-PLUG W780 iFeatures' only
product function / Access Point Mode product function / client Mode number of SSIDs product function • iPCF Access Point • iPCF-MC Access Point • iPCF-MC Access Point • iPCF-MC client number of iPCF-capable radio modules product function / iREF number of iREF-capable radio modules product function / iPRP product functions / management, configuration, engineeri number of manageable IP addresses / in client	Yes Yes 16 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' No; In combination only with 'KEY-PLUG W780 iFeatures' Yes; In combination with the 'KEY-PLUG W780 iFeatures' only
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product function / Access Point Mode product function / client Mode number of SSIDs product function	Yes Yes 16 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' No; In combination only with 'KEY-PLUG W780 iFeatures' Yes; In combination with the 'KEY-PLUG W780 iFeatures' only 18 Yes
product function / Access Point Mode product function / client Mode number of SSIDs product function	Yes Yes 16 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' No; In combination only with 'KEY-PLUG W780 iFeatures' Yes; In combination with the 'KEY-PLUG W780 iFeatures' only Ng 8 Yes Yes
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product function / Access Point Mode product function / client Mode number of SSIDs product function • iPCF Access Point • iPCF-MC Access Point • iPCF-MC Access Point • iPCF-MC client number of iPCF-capable radio modules product function / iREF number of iREF-capable radio modules product function / iPRP product functions / management, configuration, engineeri number of manageable IP addresses / in client product function • CLI • web-based management • MIB support • TRAPs via email • configuration with STEP 7 • configuration with STEP 7 • configuration with IWLAN controller • operation with Enterasys WLAN controller	Yes Yes 16 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' No; In combination only with 'KEY-PLUG W780 iFeatures' Yes; In combination with the 'KEY-PLUG W780 iFeatures' only No Yes
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• 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
link check	No
 connection monitoring IP-Alive 	No
localization via Aeroscout	Yes
SysLog	Yes
protocol / is supported	
• SNMP v1	Yes
• SNMP v2	Yes
• SNMP v3	Yes
product functions / VLAN	
product function	
function VLAN with IWLAN	Yes
	165
product functions / DHCP	
product function	V
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	Yes
 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,
for anti-halforn COA 1111	Group IIC, T4
• for safety / from CSA and UL	UL 60950-1, CSA C22.2 No. 60950-1
certificate of suitability	v.
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 	Yes
NEMA TS2	No
• IEC 61375	No
• IEC 61850-3	No
NEMA4X	Yes
Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af	No
Power-over-Ethernet according to IEEE802.3at for type 2	No
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 alocalization	<u> </u>
standards, specifications, approvals / marine classificatio	
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
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standards, specifications, approvals / hazardous environr	
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
certificate of suitability / CCC / for hazardous zone	Yes
according to GB standard	
accessories	
accessories	24 V DC screw terminal included in scope of delivery
further information / internet-Links	
Internet-Link	
	http://www.ciamans.com/tip.coloction.tool
to website: TIA Selection Tool to web pages selection and 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
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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.
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