SIEMENS

Data sheet   **6GK5786-2FC00-0AC0**

product type designation	**W786-2 RJ45 (ISR)**

IWLAN access point, SCALANCE W786-2 RJ45, 2 radios, 6 R-SMA antenna connections, IEEE 802.11a/b/g/h/n, 2.4/5 GHz, gross 450 Mbit/s per radio, 1 x RJ45 (max. 1 Gbit/s), PoE, 24 V DC, IP65, (-40 to +60 °C), WPA2/802.11I/e, Observe national approval! (CERT ID: EAPN-W2-RJ-E3) Includes MPCIE-R1-ABGN-U3 Scope of delivery: Manuals on CD, de/en 1 x joint block, only for operation in Israel.

transfer rate	
transfer rate	
● with WLAN / maximum	450 Mbit/s
● for Industrial Ethernet	10, 1000, 1000 Mbit/s
transfer rate / for Industrial Ethernet	
● minimum	10 Mbit/s
● maximum	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 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 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	0.63 A

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● at AC / at 230 V / typical	0.07 A
● with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	0.22 A
power loss [W]	
● at DC / at 24 V / typical	15 W
● at AC / at 230 V / typical	15 W
● with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical	10.7 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	-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 °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
● 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 / client Mode	Yes
number of SSIDs	16
product function	
● iPCF Access Point	Yes; Only in combination with the 'KEY-PLUG W780 iFeatures'
● iPCF client	Yes; Only in combination with the 'KEY-PLUG W780 iFeatures' or 'KEY-PLUG W740 iFeatures'
● iPCF-MC Access Point	Yes; Only in combination with the 'KEY-PLUG W780 iFeatures'
● iPCF-MC client	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	Yes
● web-based management	Yes
● MIB support	Yes
● TRAPs via email	Yes
● configuration with STEP 7	Yes
● configuration with STEP 7 in the TIA Portal	Yes
● operation with IWLAN controller	No

● operation with Enterasys WLAN controller	No
● forced roaming on IP down with IWLAN	Yes
● forced roaming on link down with IWLAN	Yes
● WDS	Yes
protocol / is supported	
● Address Resolution Protocol (ARP)	Yes
● 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 function / is supported / identification link	Yes; acc. to IEC 61406-1:2022

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

product functions / DHCP

product function	
● 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, 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	No
● CE marking	No
● 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	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
reference code	
● according to IEC 81346-2:2019	KFE
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
● to website: Industry Online Support	https://support.industry.siemens.com
security information	
security information	Siemens provides products and solutions with industrial cybersecurity functions

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Approvals / Certificates

General Product Approval		For use in hazard-ous locations	Radio Equipment Type Approval Certificate
[Declaration of Conformity](#)	EAC [Manufacturer Declaration](#)	[CCC-Ex](#)	[Miscellaneous](#)

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