SIEMENS

Data sheet

6GK5786-2FC00-0AC0



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), WPA2/802.11l/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 terminal block, only for operation in Israel.

Transfer rate	
450 Mbit/s	
10, 1000, 1000 Mbit/s	
10 Mbit/s	
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)
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 / 1	
• from terminal block	19.2 V
Supply voltage / 2	
from terminal block	28.8 V
Supply voltage	
 from Power-over-Ethernet acc. to IEEE802.3at for type 1 and IEEE802.3af 	48 V
 from Power-over-Ethernet acc. 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
• 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
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
Mounting type	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 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

operation with IWLAN controller operation with Enterasys WLAN controller operation with Enterasys WLAN controller offorced roaming on IP down with IWLAN offorced roaming on III known with IWLAN own	 configuration with STEP 7 in the TIA Portal 	Yes
• forced roaming on IP down with IMLAN • forced roaming on link down with IMLAN • wos • wos • wos Protocol / is supported • Address Resolution Protocol (ARP) • ICMP • Teinet • Address Resolution Protocol (ARP) • Teinet • Address Resolution Protocol (ARP) • Teinet • HTTP • Yes • TETP • DCP • LLDP • LLDP • LLDP Identification & maintenance function • I&MO - device-specific information • I&MO - device-specific information • I&MI - higher-level designation/location designation Product functions / Diagnostics Product function • PROFINET IO diagnosis • Link Check • connection monitoring IP-Alive • localization via Aeroscout • Syst.og Protocol / is supported • SNMP v1 • SNMP v2 • SNMP v3 Product function • function VLAN Product function • function VLAN Product function • function VLAN with IWLAN Product function • DHCP client • DHCP Polient • DHCP Server • DHCP Option 82 Product functions / redundancy	•	No
forced roaming on IP down with IWLAN forced roaming on link down with IWLAN WDS WDS Yes Protocol is supported Address Resolution Protocol (ARP) IGMP Address Resolution Protocol (ARP) Yes IGMP Yes IGMP Yes HTTP Yes HTTP Yes HTTP Yes IFTP Yes UCDP IDDP Identification & maintenance function I&M0 - device-specific information I&M1 - higher-level designation/location designation IBM1 - higher-level designation/location designation Product functions / Diagnostics Product functions / Diagnostics Product function via Aeroscout Syst.og Yes Ichic Check No Iocalization via Aeroscout Syst.og Yes Protocol / is supported SNMP v1 SNMP v2 Yes SNMP v3 Product function • function VLAN Product function • function VLAN Product function • function VLAN with IWLAN Product function • function VLAN with IWLAN Product function • function VLAN with IWLAN Product function • DHCP client • DHCP Server Yes DHCP Option 82 Product functions / redundancy	operation with Enterasys WLAN controller	No
Protocol / is supported Address Resolution Protocol (ARP) ICMP Telnet Telnet HTTP Yes TETP HTTPS Pes TETP DCP LLDP Identification & maintenance function IsMO - device-specific information Resignation Product functions / Diagnostics Product function PROFINET IO diagnosis Link Check connection monitoring IP-Alive SysLog Protocol / is supported SysLog Product functions / Yes SNMP v1 SNMP v2 SNMP v3 Product functions / VAN Product functions / VAN Product functions / VAN Product functions / VES Product function via Aeroscout SysLog Protocol / is supported SNMP v1 SNMP v2 SNMP v3 Product functions / VES Product functions / VLAN Product functions / VLAN Product function Inclient / Yes Product function / VLAN Product functions / DHCP Product function DHCP client DHCP client Product functions / Yes Product functions / Pedundancy		Yes
Protocol / is supported • Address Resolution Protocol (ARP) • ICMP • Teinet • Teinet • HTTP • Teinet • HTTP • HTTPS • HTTPS • DCP • LLDP • LLDP • LLDP Identification & maintenance function • I&M0 - device-specific information • I&M0 - device-specific information • I&M1 - higher-level designation/location designation • PROFINET 10 diagnosis • PROFINET 10 diagnosis • PROFINET 10 diagnosis • Link Check • Connection monitoring IP-Alive • Iocalization via Aeroscout • SysLog Protocol / is supported • SNMP v1 • SNMP v2 • SNMP v3 Product functions / DLAN Product functions / DLAN Product functions / VAN Product functions / VAN Product functions / VAN Product functions / VAN Product functions / DHCP Product functions / DHCP Product functions / DHCP Product functions / DHCP Product functions / Pedundancy	 forced roaming on link down with IWLAN 	Yes
Address Resolution Protocol (ARP) ICMP ICMP Teinet Yes HTTP Yes HTTP Yes TFTP DCP LLDP Identification & maintenance function IsM0 - device-specific information IsM0 - device-specific information IsM0 - device-specific information Yes Identification & maintenance function IsM1 - higher-level designation/location designation Product functions / Diagnostics Product function PROFINET IO diagnosis Link Check No connection monitoring IP-Alive No localization via Aeroscout Syst.og Product / is supported SNMP v1 SNMP v1 SNMP v2 SNMP v3 Product functions / VLAN Product functions / VLAN Product functions / VLAN Product function function VLAN with IWLAN Yes Product function DHCP Client DHCP Server Yes DHCP Option 82 Product functions / redundancy		Yes
• ICMP • Telnet • Telnet • Telnet • HTTP • HTTPS • HTTPS • HTTPS • PCP • HLDP • DCP • LLDP Identification & maintenance function • I&MO - device-specific information • I&M1 - higher-level designation/location designation Product functions / Diagnostics Product functions / Diagnostics Product function onitoring IP-Alive • Connection monitoring IP-Alive • Iocalization via Aeroscout • SysLog • SysLog Protoco/ is supported • SNMP v1 • SNMP v2 • SNMP v3 Product functions / VES • SNMP v3 Product functions / VES • SNMP v3 Product functions / VES • SNMP v3 Product function / Ves • SNMP v3 Product functions / VLAN Product functions / VLAN Product functions / VLAN Product functions / VLAN Product function Ves • SNMP v3 Product function Ves • DHCP cleint Ves • DHCP cleint Ves • DHCP cleint Ves • DHCP option 82 Product functions / redundancy	Protocol / is supported	
Telnet HTTP HTTP Yes HTTPS Pes TFTP Pes DCP Foldentification & maintenance function I&M0 - device-specific information I&M0 - device-specific information I&M1 - higher-level designation/location designation Product functions / Diagnostics Product function / Diagnostics Product function / PROFINET IO diagnosis Link Check Iolocalization via Aeroscout SysLog Protocol / is supported SNMP v1 SNMP v2 SNMP v3 Product function / Yes Product function / Yes Product function / Yes Product function / Yes Product function / Yes Product function / Yes Product function / VLAN Product function / Product function Product function / DHCP Product function / Pes Product function / Yes Product function / Pes	Address Resolution Protocol (ARP)	Yes
HTTP HTTPS HTTPS Yes TFTTP DCP LLDP Ves LLDP Ves Identification & maintenance function I&M0 - device-specific information I&M1 - higher-level designation/location designation Product functions / Diagnostics Product functions / Diagnostics Product function No PROFINET IO diagnosis Link Check Connection monitoring IP-Alive No localization via Aeroscout SysLog Protocol / is supported SNMP v1 SNMP v2 SNMP v2 SNMP v3 Product functions / VLAN Product functions / VLAN Product functions / VLAN Product functions / DHCP Product function DHCP client DHCP Server DHCP Option 82 Product functions / redundancy	• ICMP	Yes
HTTPS TFTP TFTP PCS TFTP DCP LLDP Ves LLDP Ves Identification & maintenance function IsM0 - device-specific information IsM0 - device-specific information Ves IsM1 - higher-level designation/location designation Product functions / Diagnostics Product function PROFINET IO diagnosis Link Check Connection monitoring IP-Alive Iocalization via Aeroscout SysLog Yes Protocol / is supported SNMP v1 SNMP v2 SNMP v3 Product functions / VLAN Product functions / DHCP Product function DHCP client DHCP client DHCP Option 82 Product functions / redundancy	● Telnet	Yes
• TFTP • DCP • DCP • LLDP 1dentification & maintenance function • 18.M0 - device-specific information • 18.M1 - higher-level designation/location designation Product functions / Diagnostics Product function • PROFINET IO diagnosis • Link Check • connection monitoring IP-Alive • localization via Aeroscout • SysLog Protocol / is supported • SNMP v1 • SNMP v2 • SNMP v3 Product functions / VLAN Product functions / VLAN Product functions / VLAN Product functions / VLAN Product functions / DHCP Product function • DHCP client • DHCP Server • DHCP Option 82 Product functions / redundancy	• HTTP	Yes
● DCP ● LLDP Product functions / Diagnostics Product function in a Aroscout ● localization via Aeroscout ● SNMP v1 ● SNMP v2 ● SNMP v3 Product functions / VLAN Product functions / DHCP Product functions / DHCP Product functions / DHCP Product function % DHCP Product functions / DHCP Product functions / VLAN Product functions / DHCP Product functions / DHCP Product function % Pesserver Yes ● DHCP Option 82 Product functions / redundancy	• HTTPS	Yes
• LLDP Yes Identification & maintenance function • I&M0 - device-specific information Yes • I&M1 - higher-level designation/location designation 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 functions / VLAN Product function • function VLAN with IWLAN Yes Product function • DHCP Client Yes • DHCP Server Yes • DHCP Option 82 Product functions / redundancy	• TFTP	Yes
Identification & maintenance function • I&M0 - device-specific information • I&M1 - higher-level designation/location designation Product functions / Diagnostics Product function • PROFINET IO diagnosis • Link Check • connection monitoring IP-Alive • localization via Aeroscout • SysLog Protocol / is supported • SNMP v1 • SNMP v1 • SNMP v2 • SNMP v3 Product functions / VLAN Product functions / VLAN Product functions / DHCP Product functions / DHCP Product functions / DHCP Product function	• DCP	Yes
IsM0 - device-specific information IsM1 - higher-level designation/location designation Product functions / Diagnostics Product function PROFINET IO diagnosis Link Check Connection monitoring IP-Alive Iocalization via Aeroscout SysLog Protocol / is supported SNMP v1 SNMP v2 SNMP v3 Product function Product functions / VLAN Product function Indicate the function Indicate the function Indicate the function of the function of the function of the function Indicate the function Indicate the function Indicate the function of the function of the function Indicate the function of the function Indicate the function of the function Indicate the function of the functio	• LLDP	Yes
I&M1 - higher-level designation/location designation Product functions / Diagnostics Product function	Identification & maintenance function	
Product functions / Diagnostics Product function PROFINET IO diagnosis Link Check Connection monitoring IP-Alive Iocalization via Aeroscout SysLog Protocol / is supported SNMP v1 SNMP v2 SNMP v3 Product functions / VLAN Product function VLAN with IWLAN Product function VLAN with IWLAN Product function / DHCP Product function DHCP client DHCP server DHCP Option 82 Product functions / redundancy	• I&M0 - device-specific information	Yes
Product functions / Diagnostics Product function PROFINET IO diagnosis Link Check Connection monitoring IP-Alive Iocalization via Aeroscout SysLog Protocol / is supported SNMP v1 SNMP v2 SNMP v3 Product functions / VLAN Product function VLAN with IWLAN Product function VLAN with IWLAN Product function / DHCP Product function DHCP client DHCP server DHCP Option 82 Product functions / redundancy	• I&M1 – higher-level designation/location	Yes
Product function PROFINET IO diagnosis Link Check connection monitoring IP-Alive localization via Aeroscout SysLog Protocol / is supported SNMP v1 SNMP v2 SNMP v3 Product functions / VLAN Product function function VLAN with IWLAN Product function Function VLAN with IWLAN Product function Product function Here SysLog Product function / VLAN Product function Function VLAN with IWLAN Product function / DHCP Product function / Peserver DHCP client DHCP Server DHCP Option 82 Product functions / redundancy	designation	
PROFINET IO diagnosis Link Check Link Check Connection monitoring IP-Alive Connection via Aeroscout SysLog Protocol / is supported SNMP v1 SNMP v2 SNMP v2 SNMP v3 Product functions / VLAN Product function Connection via Aeroscout Yes Yes Yes SNMP v3 Product functions / VLAN Product function Connection via Aeroscout Yes Yes Yes SNMP v3 Product functions / VLAN Product function Connection via Aeroscout Yes Product function yes Product function yes DHCP Product function PhCP client DHCP Server DHCP Option 82 Product functions / redundancy	Product functions / Diagnostics	
Link Check connection monitoring IP-Alive localization via Aeroscout SysLog Protocol / is supported SNMP v1 SNMP v2 SNMP v3 Product functions / VLAN Product function function VLAN with IWLAN Product function Product function DHCP Product function DHCP client DHCP Option 82 Product functions / redundancy	Product function	
connection monitoring IP-Alive localization via Aeroscout Yes SysLog Yes Protocol / is supported SNMP v1 SNMP v2 SNMP v3 Product functions / VLAN Product function function VLAN with IWLAN Product function OHCP client DHCP server DHCP Option 82 Product functions / redundancy Product functions / redundancy	 PROFINET IO diagnosis 	Yes
• localization via Aeroscout • SysLog Protocol / is supported • SNMP v1 • SNMP v2 • SNMP v3 Product functions / VLAN Product function • function VLAN with IWLAN Product function • DHCP client • DHCP Server • DHCP Option 82 Product functions / redundancy Product functions / Yes Product function • punctions / punctions / yes Product function • punctions / punctions / yes Product functions / yes Product functions / yes	Link Check	No
SysLog Protocol / is supported SNMP v1 SNMP v2 SNMP v3 Product functions / VLAN Product function function VLAN with IWLAN Product functions / DHCP Product function DHCP client DHCP server DHCP Option 82 Product functions / redundancy	 connection monitoring IP-Alive 	No
Protocol / is supported • SNMP v1 • SNMP v2 • SNMP v3 Product functions / VLAN Product function • function VLAN with IWLAN Product function • function / DHCP Product function • DHCP client • DHCP server • DHCP Option 82 Product functions / redundancy	 localization via Aeroscout 	Yes
SNMP v1 SNMP v2 SNMP v3 Product functions / VLAN Product function function VLAN with IWLAN Product functions / DHCP Product function DHCP client DHCP server DHCP Option 82 Product functions / redundancy	SysLog	Yes
SNMP v2 SNMP v3 Product functions / VLAN Product function function VLAN with IWLAN Product functions / DHCP Product function DHCP client DHCP server DHCP Option 82 Product functions / redundancy	Protocol / is supported	
SNMP v3 Product functions / VLAN Product function • function VLAN with IWLAN Product functions / DHCP Product function • DHCP client • DHCP server • DHCP Option 82 Product functions / redundancy	• SNMP v1	Yes
Product functions / VLAN Product function • function VLAN with IWLAN Product functions / DHCP Product function • DHCP client • DHCP server • DHCP Option 82 Product functions / redundancy	• SNMP v2	Yes
Product function • function VLAN with IWLAN Product functions / DHCP Product function • DHCP client • DHCP server • DHCP Option 82 Product functions / redundancy	• SNMP v3	Yes
 function VLAN with IWLAN Product functions / DHCP Product function DHCP client DHCP server DHCP Option 82 Product functions / redundancy 	Product functions / VLAN	
Product functions / DHCP Product function • DHCP client Yes • DHCP server Yes • DHCP Option 82 Yes Product functions / redundancy	Product function	
Product function • DHCP client Yes • DHCP server Yes • DHCP Option 82 Yes Product functions / redundancy	• function VLAN with IWLAN	Yes
 DHCP client DHCP server DHCP Option 82 Yes Product functions / redundancy 		
DHCP server DHCP Option 82 Product functions / redundancy Yes Yes	Product functions / DHCP	
DHCP Option 82 Yes Product functions / redundancy		
Product functions / redundancy	Product function	Yes
	Product function • DHCP client	
Protocol / is supported	Product function • DHCP client • DHCP server	Yes
	Product function DHCP client DHCP server DHCP Option 82 Product functions / redundancy	Yes

• 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
• for hazardous zone	EN 60079-15:2005, EN 60079-0:2006, II 3 G Ex nA II T4 KEMA 07 ATEX 0145X
for safety / from CSA and UL	UL 60950-1, 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 	Yes
NEMA TS2	No
• IEC 61375	No
• IEC 61850-3	No
• NEMA4X	Yes

Power-over-Ethernet according IEEE802.3at	Yes
for type 1 and IEEE802.3af	Van
 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
•	Yes
• IEEE 802.11h	Yes
• IEEE 802.11i	
• IEEE 802.11n	Yes
Wireless approval	For operation in the USA, you will find more information under: www.siemens.de/funkzulassungen
Marine classification association	
 American Bureau of Shipping Europe Ltd. (ABS) 	Yes
Bureau Veritas (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
accessories	
accessories	24 V DC screw terminal included in scope of delivery
Further information / Internet-Links	

Further	informa	tion / In	ternet-	Linke

• to website: 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

http://www.siemens.com/cax • to website: CAx Download Manager

• to website: Industry Online Support https://support.industry.siemens.com

Internet-Link

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. Thirdparty 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:

05/28/2020