SIEMENS

Product data sheet 6GK5786-2BA60-6AA0

Product-type designation



SCALANCE W786-2RR

IWLAN ACCESS POINT SCALANCE W786-2RR, FOR USE OUTSIDE OF USA IEEE 802.11B/G/A/H, INDUSTRIAL WIRELESS LAN WITH RAPID ROAMING (IWLAN RR) 2.4/5 GHZ, UP TO 54MBIT/S, WPA2/802.11I/11E, NOTE NATIONAL APPROVALS, 48VDC, IP65(-40-+70 DGR C), 4XINTERNAL ANTENNAS, 2 RADIO INTERFACES, POE, RJ45 (TWISTED PAIR) SOCKET SCOPE OF SUPPLY.: MOUNT. MAT.,

DOCU ON CD IN GERMAN AND ENGLISH;

Transmission rate

Transmission rate

• with W-LAN / maximum

• with Industrial Ethernet

note

54 Mbit/s

10 ... 100 Mbit/s

Due to the simultaneous use of several radio channels, a transmission rate of 108 Mbit/s is possible (turbo mode)

Interfaces

Number of electrical connections

- for network components and terminal equipment
- for power supply
- for redundant power supply

Design of the electrical connection

• for network components and terminal equipment

Supply voltage, current consumption, power loss

• for power supply

design of the removable storage / C-PLUG

RJ45 socket

11040 300KG

2-pole connector (48 V DC) or optionally available power supply adapter (4-pole 12 to 24 V DC or 3-pole 100 to 240 V AC)

Yes

1

Interfaces / wireless

Number of radio cards / permanently installed

2

Number of internal antennas

Type of / supply voltage	DC
Supply voltage	
• 1 / from terminal block	48 V
• from Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af	48 V
 from optional integratable power supply 	
• with AC	100 240 V
• with DC	12 24 V
Current consumed	
at 24 V / with DC / typical	0.34 A
at 48 V / with DC / typical	0.17 A
• at 230 V / with AC / typical	0.04 A
 with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical 	0.34 A
Effective power loss	
at 24V / for DC / typical	8 W
at 48 V / with DC / typical	8 W
at 230 V / with AC / typical	8 W
 with Power-over-Ethernet according to IEEE802.3at for type 1 and IEEE802.3af / typical 	8 W
Permitted ambient conditions	
Ambient temperature	
, and the polatical	
during operating	-40 +70 °C
	-40 +70 °C -40 +85 °C
during operating	
during operatingduring storage	-40 +85 °C
 during operating during storage during transport Relative humidity / at 25 °C / without condensation / during operating	-40 +85 °C -40 +85 °C
 during operating during storage during transport Relative humidity / at 25 °C / without condensation / during operating / maximum	-40 +85 °C -40 +85 °C 100 %
 during operating during storage during transport Relative humidity / at 25 °C / without condensation / during operating / maximum Protection class IP 	-40 +85 °C -40 +85 °C 100 % IP65 When using the power supply 100 to 240 V AC, an operating
during operating during storage during transport Relative humidity / at 25 °C / without condensation / during operating / maximum Protection class IP Ambient condition / for (standard) operation mode	-40 +85 °C -40 +85 °C 100 % IP65 When using the power supply 100 to 240 V AC, an operating
 during operating during storage during transport Relative humidity / at 25 °C / without condensation / during operating / maximum Protection class IP Ambient condition / for (standard) operation mode Design, dimensions and weight	-40 +85 °C -40 +85 °C 100 % IP65 When using the power supply 100 to 240 V AC, an operating temperature of -40 °C to +60 °C is permissible
 during operating during storage during transport Relative humidity / at 25 °C / without condensation / during operating / maximum Protection class IP Ambient condition / for (standard) operation mode Design, dimensions and weight Width / of enclosure / without antenna 	-40 +85 °C -40 +85 °C 100 % IP65 When using the power supply 100 to 240 V AC, an operating temperature of -40 °C to +60 °C is permissible 251 mm
 during operating during storage during transport Relative humidity / at 25 °C / without condensation / during operating / maximum Protection class IP Ambient condition / for (standard) operation mode Design, dimensions and weight Width / of enclosure / without antenna Height / of enclosure / without antenna 	-40 +85 °C -40 +85 °C 100 % IP65 When using the power supply 100 to 240 V AC, an operating temperature of -40 °C to +60 °C is permissible 251 mm 251 mm
 during operating during storage during transport Relative humidity / at 25 °C / without condensation / during operating / maximum Protection class IP Ambient condition / for (standard) operation mode Design, dimensions and weight Width / of enclosure / without antenna Height / of enclosure / without antenna Depth / of enclosure / without antenna 	-40 +85 °C -40 +85 °C 100 % IP65 When using the power supply 100 to 240 V AC, an operating temperature of -40 °C to +60 °C is permissible 251 mm 251 mm 72 mm
 during operating during storage during transport Relative humidity / at 25 °C / without condensation / during operating / maximum Protection class IP Ambient condition / for (standard) operation mode Design, dimensions and weight Width / of enclosure / without antenna Height / of enclosure / without antenna Depth / of enclosure / without antenna Net weight 	-40 +85 °C -40 +85 °C 100 % IP65 When using the power supply 100 to 240 V AC, an operating temperature of -40 °C to +60 °C is permissible 251 mm 251 mm 72 mm
 during operating during storage during transport Relative humidity / at 25 °C / without condensation / during operating / maximum Protection class IP Ambient condition / for (standard) operation mode Design, dimensions and weight Width / of enclosure / without antenna Height / of enclosure / without antenna Depth / of enclosure / without antenna Net weight Mounting type 	-40 +85 °C -40 +85 °C 100 % IP65 When using the power supply 100 to 240 V AC, an operating temperature of -40 °C to +60 °C is permissible 251 mm 251 mm 72 mm 2.24 kg
 during operating during storage during transport Relative humidity / at 25 °C / without condensation / during operating / maximum Protection class IP Ambient condition / for (standard) operation mode Design, dimensions and weight Width / of enclosure / without antenna Height / of enclosure / without antenna Depth / of enclosure / without antenna Net weight Mounting type wall mounting 	-40 +85 °C -40 +85 °C 100 % IP65 When using the power supply 100 to 240 V AC, an operating temperature of -40 °C to +60 °C is permissible 251 mm 251 mm 72 mm 2.24 kg Yes For mast mounting, 35 mm DIN rail mounting and S7-300 rail
 during operating during storage during transport Relative humidity / at 25 °C / without condensation / during operating / maximum Protection class IP Ambient condition / for (standard) operation mode Design, dimensions and weight Width / of enclosure / without antenna Height / of enclosure / without antenna Depth / of enclosure / without antenna Net weight Mounting type wall mounting Mounting type 	-40 +85 °C -40 +85 °C 100 % IP65 When using the power supply 100 to 240 V AC, an operating temperature of -40 °C to +60 °C is permissible 251 mm 251 mm 72 mm 2.24 kg Yes For mast mounting, 35 mm DIN rail mounting and S7-300 rail

Product function	for WLAN in 5 GHz frequency band	4.9 5.8 GHz
- Access Point Mode	Product properties, functions, components / general	
- Client Mode Yes Number of SSIDs 16 Product function - Dual Client Yes - iHOP Yes - iPCF Access Point Yes - iPCF- Access Point Yes - iPCF- MC access Point - iPCF- Acce	Product function	
Number of SSIDs 16 Product function Yes · IHOP Yes · IHOP Access Point Yes · IPCF Access Point Yes · IPCF-MC Access Point Yes · IPCF-MC Glient Yes Number of IPCF-capable radio modules 1 Product functions / management, configuration 8 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 IWLAN controller No · iQoS Yes Forced roaming with IWLAN Yes · WDS Yes Protocol / is supported Yes · CMP Yes · Tainet Yes · HTTP Yes <t< td=""><td>Access Point Mode</td><td>Yes</td></t<>	Access Point Mode	Yes
Product function	Client Mode	Yes
. Dual Client . iHOP . iHOP . iHOP Access Point . iPCF client . iPCF client . iPCF client . iPCF-MC access Point . iPCF-MC access Point . iPCF-MC client . iPC	Number of SSIDs	16
HOP	Product function	
• IPCF Access Point Yes • IPCF-MC Client Yes • IPCF-MC Client Yes Number of IPCF-capable radio modules 1 Product functions / management, configuration Number of manageable IP addresses / in client 8 Product function 8 • CLI Yes • web-based management Yes • MIB support Yes • TRAPs via email Yes • Configuration with STEP 7 in the TIA Portal Yes • configuration with STEP 7 in the TIA Portal Yes • operation with IWLAN controller No • operation with Enteracys WLAN controller No • IQOS Yes • forced roaming with IWLAN Yes • WDS Yes Protocol / is supported • Address Resolution Protocol (ARP) Yes • ICIMP Yes • Telnet Yes • HTTP Yes • TFTP Yes • SMMP v1 Yes • SNMP v2 Yes • DCP	Dual Client	Yes
• iPCF client Yes • iPCF-MC Access Point Yes • iPCF-MC client Yes Number of iPCF-capable radio modules 1 Product functions / management, configuration Number of manageable IP addresses / in client 8 Product function 8 • CLI Yes • web-based management Yes • MIB support Yes • TRAPs via email Yes • Configuration with STEP 7 in the TIA Portal Yes • configuration with IMLAN controller No • operation with IMLAN controller No • operation with Enteracys WLAN controller No • iQoS Yes • forced roaming with IMLAN Yes • forced roaming with IMLAN Yes • rotocol / is supported Yes • Address Resolution Protocol (ARP) Yes • ICMP Yes • Telnet Yes • HTTP Yes • TFIP Yes • SNMP v1 Yes • SNMP v2 Yes	• iHOP	Yes
• IPCF-MC Access Point Yes Number of IPCF-capable radio modules 1 Product functions / management, configuration Number of manageable IP addresses / in client 8 Product function 4 • 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 with IWLAN Yes • forced roaming with IWLAN Yes • Protocol / is supported Address Resolution Protocol (ARP) Yes • ICIMP Yes • Teinet Yes • HTTPS Yes • FTFP Yes • SNMP v1 Yes • SNMP v2 Yes • DCP Yes	• iPCF Access Point	Yes
• IPCF-MC client Yes Number of IPCF-capable radio modules 1 Product functions / management, configuration 8 Product function 4 • 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 • configuration with WLAN controller No • operation with Enterasys WLAN controller No • forced roaming with IWLAN Yes • forced roaming with IWLAN Yes • MDS Yes Protocol / is supported Address Resolution Protocol (ARP) Yes • ICMP Yes • Teinet Yes • HTTPS Yes • FTFP Yes • SNMP v1 Yes • SNMP v2 Yes • DCP Yes	• iPCF client	Yes
Number of IPCF-capable radio modules Product functions / management, configuration Number of manageable IP addresses / in client • CLI • Yes • web-based management • Yes • MIB support • TRAPs via email • Configuration with STEP 7 • configuration with STEP 7 in the TIA Portal • operation with IWLAN controller • operation with Enterasys WLAN controller • IQOS • forced roaming with IWLAN • WDS Protocol / is supported • Address Resolution Protocol (ARP) • Telnet • HITTP • Yes • Telnet • HITTP • Yes • TEIPT • Yes • SNMP v1 • SNMP v2 • SNMP v3 • DCP • Yes • SNMP v3 • DCP	• iPCF-MC Access Point	Yes
Product functions / management, configuration Number of manageable IP addresses / in client 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 with IWLAN Yes • forced roaming with IWLAN Yes • Telnet Yes • Telnet Yes • Telnet Yes • TEINET Y	• iPCF-MC client	Yes
Number of manageable IP addresses / in client Product function CLI Yes web-based management Yes MIB support Yes TRAPs via email Configuration with STEP 7 configuration with STEP 7 in the TIA Portal operation with IWLAN controller operation with Enterasys WLAN controller No operation with IWLAN Yes forced roaming with IWLAN WDS Protocol / is supported Address Resolution Protocol (ARP) Yes HTTP Telnet HTTP Yes HTTP Yes TFTP SNMP v1 SNMP v2 SNMP v3 DCP Yes Ves Yes Yes Yes Telnet Yes SNMP v3 Yes POCP	Number of iPCF-capable radio modules	1
Product function CLI web-based management Yes MIB support TRAPs via email Configuration with STEP 7 configuration with STEP 7 in the TIA Portal operation with IWLAN controller operation with IWLAN controller operation with IWLAN operation with IWLAN operation with IWLAN Ves forced roaming with IWLAN WDS Protocol / is supported Address Resolution Protocol (ARP) Yes HTTP Telnet Yes HTTP HTTPS Yes SNMP v1 SNMP v2 SNMP v3 DCP Yes Yes Yes Yes Yes Yes Yes Ye	Product functions / management, configuration	
- CLI - web-based management - Wes - MIB support - TRAPs via email - Configuration with STEP 7 - configuration with STEP 7 in the TIA Portal - operation with IWLAN controller - operation with Enterasys WLAN controller - operation with IWLAN - operatio	Number of manageable IP addresses / in client	8
• 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 • QoS Yes • forced roaming with IWLAN Yes • WDS Yes Protocol / is supported Address Resolution Protocol (ARP) Yes • ICMP Yes • Teinet Yes • HTTP Yes • HTTPS Yes • TFTP Yes • SNMP v1 Yes • SNMP v2 Yes • DCP Yes	Product function	
 MIB support TRAPs via email Configuration with STEP 7 configuration with STEP 7 in the TIA Portal operation with IWLAN controller operation with Enterasys WLAN controller iQoS forced roaming with IWLAN WDS Yes fortced / is supported Address Resolution Protocol (ARP) ICMP Telnet HTTP HTTPS TFTP SNMP v1 SNMP v2 SNMP v3 DCP 	• CLI	Yes
 TRAPs via email Configuration with STEP 7 configuration with STEP 7 in the TIA Portal operation with IWLAN controller operation with Enterasys WLAN controller No operation with Enterasys WLAN controller iQoS forced roaming with IWLAN WDS Yes forceol / is supported Address Resolution Protocol (ARP) ICMP Telnet HTTP HTTP HTTPS TFTP SNMP v1 SNMP v2 SNMP v3 DCP 	web-based management	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 • iQoS Yes • forced roaming with IWLAN Yes • WDS Yes Protocol / is supported Yes • Address Resolution Protocol (ARP) Yes • ICMP Yes • Telnet Yes • HTTP Yes • HTTPS Yes • TFTP Yes • SNMP v1 Yes • SNMP v2 Yes • SNMP v3 Yes • DCP Yes	MIB support	Yes
configuration with STEP 7 in the TIA Portal operation with IWLAN controller operation with Enterasys WLAN controller No iQoS forced roaming with IWLAN Yes WDS Yes Protocol / is supported Address Resolution Protocol (ARP) Yes Telnet HTTP HTTP Yes HTTPS Yes SNMP v1 SNMP v2 SNMP v3 DCP Yes Yes Yes Yes Yes Yes Yes Yes	TRAPs via email	Yes
 operation with IWLAN controller operation with Enterasys WLAN controller iQoS forced roaming with IWLAN WDS Yes WDS Protocol / is supported Address Resolution Protocol (ARP) ICMP Telnet HTTP HTTPS TFTP SNMP v1 SNMP v2 SNMP v3 DCP 	Configuration with STEP 7	Yes
operation with Enterasys WLAN controller iQoS forced roaming with IWLAN Yes WDS Protocol / is supported Address Resolution Protocol (ARP) ICMP Telnet HTTP HTTPS HTTP SNMP v1 SNMP v2 SNMP v3 DCP Yes Yes Yes Yes Yes Yes Yes Ye	configuration with STEP 7 in the TIA Portal	Yes
• iQoS Yes • forced roaming with IWLAN Yes • WDS Yes Protocol / is supported *** • Address Resolution Protocol (ARP) Yes • ICMP Yes • Telnet Yes • HTTP Yes • HTTPS Yes • TFTP Yes • SNMP v1 Yes • SNMP v2 Yes • SNMP v3 Yes • DCP Yes	operation with IWLAN controller	No
 • forced roaming with IWLAN • WDS Protocol / is supported • Address Resolution Protocol (ARP) • ICMP • Telnet • HTTP • HTTPS • TFTP • SNMP v1 • SNMP v2 • SNMP v3 • DCP Yes 	operation with Enterasys WLAN controller	No
·WDS Yes Protocol / is supported *** • Address Resolution Protocol (ARP) Yes • ICMP Yes • Telnet Yes • HTTP Yes • HTTPS Yes • TFTP Yes • SNMP v1 Yes • SNMP v2 Yes • SNMP v3 Yes • DCP Yes	• iQoS	Yes
Protocol / is supported • Address Resolution Protocol (ARP) • ICMP • Telnet • HTTP • HTTPS • SNMP v1 • SNMP v2 • SNMP v3 • DCP • DCP Yes Yes Yes Yes Yes Yes Yes Ye	forced roaming with IWLAN	Yes
 Address Resolution Protocol (ARP) ICMP Telnet HTTP HTTPS TFTP SNMP v1 SNMP v2 SNMP v3 DCP 	• WDS	Yes
• ICMP Yes • Telnet Yes • HTTP Yes • HTTPS Yes • TFTP Yes • SNMP v1 Yes • SNMP v2 Yes • SNMP v3 Yes • DCP Yes	Protocol / is supported	
 Telnet HTTP HTTPS TFTP SNMP v1 SNMP v2 SNMP v3 DCP Yes 	Address Resolution Protocol (ARP)	Yes
 HTTP HTTPS Yes TFTP SNMP v1 SNMP v2 SNMP v3 DCP Yes Yes Yes Yes Yes Yes Yes Yes 	• ICMP	Yes
 HTTPS TFTP SNMP v1 SNMP v2 SNMP v3 DCP Yes Yes Yes Yes Yes Yes 	• Telnet	Yes
• TFTP Yes • SNMP v1 Yes • SNMP v2 Yes • SNMP v3 Yes • DCP Yes	• HTTP	Yes
• SNMP v1 Yes • SNMP v2 Yes • SNMP v3 Yes • DCP Yes	• HTTPS	Yes
 SNMP v2 SNMP v3 DCP Yes Yes Yes 	• TFTP	Yes
SNMP v3DCPYesYes	• SNMP v1	Yes
• DCP Yes	• SNMP v2	Yes
	• SNMP v3	Yes
• LLDP	• DCP	Yes
	• LLDP	Yes

Identification & maintenance function	
I&M0 - device-specific information	Yes
I&M1 – higher level designation/location designation	Yes
Product functions / Diagnosis	
Product function	
PROFINET IO diagnosis	Yes
Link Check	Yes
connection monitoring IP-Alive	Yes
localization via Aeroscout	Yes
• SysLog	Yes
Product functions / VLAN	
Product function / function VLAN with IWLAN	Yes
Product functions / DHCP	
Product function	
DHCP client	Yes
• in Client Mode / DHCP server via LAN	Yes
Product functions / Redundancy	
Protocol / is supported / STP/RSTP	Yes
Product functions / Security	
Product function	
ACL - MAC-based	Yes
Management security, ACL-IP based	No
• IEEE 802.1X (radius)	Yes
• NAT/NAPT	Yes
access protection according to IEEE802.11i	Yes
• WPA/WPA2	Yes
• TKIP/AES	Yes
Protocol / is supported / SSH	Yes
Product functions / Time	
Protocol / is supported	
• SNTP	Yes
SIMATIC Time	No
Standards, specifications, approvals	
Standard	
• for EMC / from 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 / of CSA and UL	UL 60950-1 CSA C22.2 No. 60950-1

for hazardous area / of CSA and UL	UL 1604, CSA C22.2 No. 213-M1987, CL. 1, Div. 2, GP. A,B,C,D, T4 / CL. 1, Zone 2, GP IIC, T4
Verification of suitability	
• CE mark	Yes
• EC declaration of conformity	Yes
• C-Tick	Yes
 Railway application in accordance with EN 50155 	No
• E1 approval	Yes
• NEMA4X	Yes
 Power-over-Ethernet according IEEE802.3at for type 1 and IEEE802.3af 	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	No
Wireless approval	You will find the current list of countries at: www.siemens.de/funkzulassungen
Marine classification association	
American Bureau of Shipping Europe Ltd. (ABS)	Yes
Bureau Veritas (BV)	Yes
Det Norske Veritas (DNV)	No
Germanische Lloyd (GL)	Yes
Lloyds Register of Shipping (LRS)	Yes
• Nippon Kaiji Kyokai (NK)	Yes
Polski Rejestr Statkow (PRS)	No
Accessories	
Accessories	48 V DC terminal block included in scope of delivery
Further Information / Internet Links	
Internet-Link	
to website: Industry Mall	https://www.siemens.com/industrymall
• to website: Information and Download Center	http://www.siemens.com/automation/net/catalog
to website: Image database	http://automation.siemens.com/bilddb
to website: CAx Download Manager	http://www.siemens.com/cax
to website: Industry Online Support	http://support.automation.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 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)

Aug 7, 2014

letzte Änderung:

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