SIEMENS

Data sheet

6GK1411-6CA40-0BA0

Product type designation



IE/WSN-PA LINK

IE/WSN-PA LINK for external antenna port; Gateway between WirelessHART and Ethernet; Ethernet 10/100 Mbit/s; TCP/IP, Modus TCP; Wireless HART at 2.4 GHz; national approval Europe; EXperm. Zone 2; RS 485 with Modbus RTU

Transfer rate

Transfer rate

• at the 1st interface

• at the 2nd interface

• at interface 3

10 ... 100 Mbit/s

10 ... 100 Mbit/s

9.6 ... 57.6 kbit/s

Interfaces

Number of electrical connections

- at the 1st interface / acc. to Industrial Ethernet
- at the 2nd interface / acc. to Industrial Ethernet
- at interface 3 / acc. to RS 485
- for power supply

Type of electrical connection

- at the 1st interface / acc. to Industrial Ethernet
- at the 2nd interface / acc. to Industrial Ethernet
- at interface 3 / acc. to RS 485
- for power supply

1

1

1

RJ45 port

RJ45 port

2-pole terminal strip

3-pole terminal strip

Interfaces / wireless

Number of radio cards / permanently installed	1
Number of internal antennas	0
Number of electrical connections / for external antenna(s)	1
Type of electrical connection / for external antenna(s)	N-Connector
Supply voltage, current consumption, power loss	
Type of voltage supply	DC
Supply voltage / external	24 V
Supply voltage / external	20 28 V
Type of voltage / of the supply voltage	DC
Consumed current / from external supply voltage / at DC / at 24 V / maximum	0.5 A
Power loss [W] / maximum	12 W
Ambient conditions	
Ambient temperature	
during operation	-40 +70 °C
during storage	-40 +85 °C
during transport	-40 +85 °C
Relative humidity / at 25 °C / without condensation /	90 %
during operation / maximum	
Protection class IP	IP65
Width / of the enclosure	229 mm
Height / of the enclosure	
without antenna	306 mm
with antenna	354 mm
Depth / of the enclosure	89 mm
Net weight	4.54 kg
Mounting type	Material for mast mounting included in scope of delivery
wall mounting	Yes
mast mounting	Yes
Radio frequencies	
Operating frequency / for WirelessHART in 2.4 GHz frequency band	2.4 2.5 GHz
Performance data / WirelessHART	
Number of WirelessHART devices / usable	100
Network latency	
 at 100 field devices / for WirelessHART network / maximum 	10 s
 for 50 field devices / for WirelessHART network / maximum 	5 s
Transmission link / between two devices / for WirelessHART network / maximum	100 m

• Note	Values may vary in the case of radio obstacles	
Protocol / is supported / HART protocol	Yes	
Product features, product functions, product components / general		
Protocol / is supported		
 Address Resolution Protocol (ARP) 	Yes	
• HTTP	Yes	
• HTTPS	Yes	
Modbus TCP	Yes	
 Modbus TCP secure 	Yes	
Modbus RTU	Yes	
Product functions / management, configuration, engineering		
Product function		
web-based management	Yes	
DHCP client	Yes	
Product functions / Diagnostics		
Product function		
Web-based diagnostics	Yes	
 WirelessHART diagnostics via Modbus 	Yes	
Product functions / redundancy		
Product function / Device redundancy	Yes	
Product functions / Security		
Product function		
 Password protection - multi-level 	Yes	
 WirelessHART Join Key 	Yes	
ACL - MAC-based	Yes	
 WirelessHART Network ID 	Yes	
Protocol / is supported / SSL	Yes	
Principle of encryption	AES 128 bit	
Product functions / time		
Protocol / is supported / NTP	Yes	
Standards, specifications, approvals		
Standard / for WirelessHART	HART V 7.1	
Standard for wireless communication / IEEE 802.15.4	Yes	
Certificate of suitability		
• CE marking	Yes	
● relating to CSA	CSA Division 2 & Dust Ignition-proof for Class I, Division 2, Groups A, B, C, and D. Dust Ignition-proof for Class II, Groups E, F, and G / Suitable for Class III Hazardous Locations. / Install per Siemens drawing A5E02467236A. Temperature Code: T4 (-40°C < Ta < 60°C) CSA Enclosure Type 4X	

• relating to FM

relating to ATEX

• relating to IECEx

Wireless approval

FM Division 2, Non-Incendive for Class I, Division 2, Groups A, B, C, and D. Dust Ignition-proof for Class II, III, Division 1, Groups E,

F, and G / Indoor and outdoor locations / NEMA Type 4X

Temperature Code: T4 (-40°C < Ta < 60°C)

ATEX type n, see note: Certificate number:

Baseefa10ATEX0044X, ATEX marking: Ex II 3 G, Ex nA nL IIC T4 (-40 °C <= Ta <= 60 °C), rated voltage: 28 V, ATEX dust ignition-proof: Certificate number: Baseefa10ATEX0045X, ATEX marking: II 3 D, Ex tD A22 IP66 T135 (-40 °C <= Ta <= 60 °C), rated voltage: 28 V. Note on type n: Conditions for safe handling during installation. The device does not pass the 500 V insulation test in accordance with paragraph 6.8.1 of EN 60079-15:2005. This must

be taken into account when the device is mounted.

IECEx Type n, see note: Certificate number: IECEx BAS 10.0014X, Ex nA nL IIC T4 (-40 °C <= Ta <= 60 °C), rated voltage: 28 V, ATEX dust ignition-proof, see note: Certificate number: IECEx BAS 10.0015X, Ex tD A22 IP66 T135 (-40 °C <= Ta <= 60 °C), rated voltage: 28 V. Note on type n: Conditions for safe handling during installation. The device does not pass the 500 V insulation test in accordance with paragraph 6.8.1 of EN 60079-15:2005. This must be taken into account when the device is mounted.

is mounted.

IC approval

Further information / Internet-Links

Internet-Link

• to website: Selector SIMATIC NET SELECTION TOOL

• to website: Industrial communication

• to website: Industry Mall

• to website: Information and Download Center

• to website: Image database

• to website: CAx Download Manager

• to website: Industry Online Support

http://www.siemens.com/snst

http://www.siemens.com/simatic-net

https://mall.industry.siemens.com

http://www.siemens.com/industry/infocenter

http://automation.siemens.com/bilddb

http://www.siemens.com/cax

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. 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)

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