SIEMENS

Data sheet 6GK1411-5AB10

product type designation



IE/PB LINK PN IO

IE/PB link PN IO, gateway between Industrial Ethernet and PROFIBUS, PROFINET IO proxy with real-time communication, time-of-day synchronization via SIMATIC processes, NTP, SNMP v1, LLDP, S7 routing, data record routing, connection of up to 64 S7/DPV0/DPV1 slaves, support of DP/PA link and DP/FF link, 10/100 Mbit/s fast Ethernet, MRP, 9.6 Kbit/s up to 12 Mbit/s PROFIBUS, firmware loading via configuration tool, redundant power supply, firmware version V4.0.

suitability for operation	Gateway between Industrial Ethernet and PROFIBUS
transfer rate	
transfer rate	
at the 1st interface	10 100 Mbit/s
at the 2nd interface	9.6 kbit/s 12 Mbit/s
interfaces	
number of electrical connections	
at the 1st interface / according to Industrial Ethernet	2
at the 2nd interface / according to PROFIBUS	1
for power supply	2
type of electrical connection	
at the 1st interface / according to Industrial Ethernet	RJ45 port onboard or bus adapter
type of electrical connection	
at the 2nd interface / according to PROFIBUS	9-pin Sub-D socket (RS 485)
for power supply	4-pole terminal block
design of the removable storage	
• C-PLUG	Yes
supply voltage, current consumption, power loss	
type of voltage / of the supply voltage	DC
supply voltage / external / at DC / rated value	24 V
relative positive tolerance / at DC / at 24 V	20 %
relative negative tolerance / at DC / at 24 V	15 %
consumed current	
• from external supply voltage / at DC / at 24 V / typical	0.2 A
• from external supply voltage / at DC / at 24 V / maximum	0.3 A
power loss [W]	4.8 W; Typical
ambient conditions	
ambient temperature	
 for vertical installation / during operation 	0 40 °C
 for horizontally arranged busbars / during operation 	0 00 °C
during storage	-40 +70 °C
during transport	-40 +70 °C
relative humidity	
 at 25 °C / without condensation / during operation / maximum 	95 %
protection class IP	IP20
design, dimensions and weights	
module format	ET 200SP design
width	100 mm

height depth 74 mm net weight 0.6 kg fastening method • 35 mm top hat DIN rail mounting Yes performance data / PROFIBUS DP service / as DP master • DPV0 Yes • DPV1 Yes number of DP slaves • at the 2nd interface / as DP master / maximum 64 data volume • of the address range of the inputs / as DP master / total • of the address range of the inputs / per DP slave 244 byte • of the address range of the inputs / per DP slave 244 byte • of the address range of the outputs / per DP slave 244 byte • of the address range of the outputs / per DP slave 244 byte performance data / ST communication number of possible connections / for ST communication • maximum 32 performance data / multi-protocol mode number of active connections / with multi-protocol mode performance data / PROFINET To device Yes product function / PROFINET Codevice Yes product function / Milb support protocol / is supported • SNMP v1 Yes • DCP • LLDP configuration software • required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 v9.0, PCS neo as of V3.0, PNI as of V1.0 identification & maintenance function • li&M0 - device-specific information Yes	
net weight fastening method - 35 mm top hat DIN rail mounting performance data / PROFIBUS DP service / as DP master - DPV0 - DPV1 - DPV1 - DPV1 - Of the address range of the inputs / as DP master / total - of the address range of the outputs / as DP master / total - of the address range of the outputs / as DP master / total - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - of the address range of the outputs / per DP slave - ves performance data / multi-protocol mode - number of possible connections / with multi-protocol mode - number of active connections / with multi-protocol mode - number of active connections / with multi-protocol mode - number of active connections / with multi-protocol mode - number of active connections / with multi-protocol mode - number of active connections / per DP slave - ves performance data / multi-protocol mode - ves performance data / multi-protocol mode - ves performance data / multi-protoco	
fastening method	
e 35 mm top hat DIN rail mounting performance data / PROFIBES DP service / as DP master • DPV0 • DPV1 rumber of DP slaves • at the 2nd interface / as DP master / maximum data volume • of the address range of the inputs / as DP master / total • of the address range of the outputs / as DP master / total • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • the address range of the outputs / per DP slave 2048 byte 2048	_
service / as DP master • DPV0 • DPV1 number of DP slaves • at the 2nd interface / as DP master / maximum data volume • of the address range of the inputs / as DP master / total • of the address range of the outputs / as DP master / total • of the address range of the inputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave performance data / S7 communication number of possible connections / for S7 communication • maximum 32 performance data / multi-protocol mode number of active connections / with multi-protocol mode performance data / PROFINET to device product function / PROFINET io device product function / PROFINET io device product function / MilB support • SNMP v1 • SNMP v1 • SNMP v1 • SNMP v1 • CDP • LLDP configuration software • required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 v9.0, PCS neo as of V3.0, PNI as of V1.0	
service / as DP master • DPV0 • DPV1 • OPV1 • OPV1 number of DP slaves • at the 2nd interface / as DP master / maximum 64 data volume • of the address range of the inputs / as DP master / total • of the address range of the inputs / per DP slave • of the address range of the inputs / per DP slave • of the address range of the outputs / as DP master / total • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • of the address range of the outputs / per DP slave • day byte • of the address range of the outputs / per DP slave • day byte • of the address range of the outputs / per DP slave • day byte • of the address range of the outputs / per DP slave • day byte • of the address range of the outputs / per DP slave • day byte • of the address range of the outputs / per DP slave • day byte • of the address range of the outputs / per DP slave • day byte • of the address range of the outputs / per DP slave • day byte • of the address range of the outputs / per DP slave • day byte • of the address range of the outputs / per DP slave • day byte • of the address range of the outputs / per DP slave • day byte • of the address range of the outputs / per DP slave • day byte • of the address range of the outputs / day byte • of the address range of the outputs / day byte • day byte • of the add	
DPV0 DPV1 Yes DPV1 Yes DPV1 Yes DPV1 Yes At the 2nd interface / as DP master / maximum data volume of the address range of the inputs / as DP master / total of the address range of the inputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address rang	
DPV1 number of DP slaves	
number of DP slaves	
at the 2nd interface / as DP master / maximum data volume of the address range of the inputs / as DP master / total of the address range of the outputs / as DP master / total of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave 244 byte of the address range of the outputs / per DP slave 244 byte performance data / S7 communication number of possible connections / for S7 communication maximum aga performance data / multi-protocol mode number of active connections / with multi-protocol mode performance data / PROFINET communication / as PN IO device product function / PROFINET IO device product function / MIB support protocol / is supported SNMP v1 OCP LLDP Yes LLDP configuration software o required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0 identification & maintenance function	
data volume of the address range of the inputs / as DP master / total of the address range of the outputs / as DP master / total of the address range of the outputs / per DP slave of the address range of the inputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave 244 byte performance data / S7 communication number of possible connections / for S7 communication number of possible connections / for S7 communication mumber of active connections / with multi-protocol mode number of active connections / with multi-protocol mode performance data / PROFINET communication / as PN IO device product function / PROFINET IO device product function / MIB support protocol / is supported SNMP v1 SNMP v1 Yes protocol / is supported SNMP v1 SNMP v1 Yes LLDP Yes configuration software or required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0	
of the address range of the inputs / as DP master / total of the address range of the outputs / as DP master / total of the address range of the inputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave performance data / S7 communication number of possible connections / for S7 communication maximum	
of the address range of the outputs / as DP master / total of the address range of the inputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave 244 byte performance data / ST communication number of possible connections / for ST communication o maximum 32 performance data / multi-protocol mode number of active connections / with multi-protocol mode performance data / PROFINET communication / as PN IO device product function / PROFINET IO device yes product function / MIB support yes product function / MIB support yes protocol / is supported SNMP v1 OCP Yes LLDP Configuration software o required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0 identification & maintenance function	
of the address range of the inputs / per DP slave of the address range of the outputs / per DP slave of the address range of the outputs / per DP slave performance data / S7 communication number of possible connections / for S7 communication o maximum 32 performance data / multi-protocol mode number of active connections / with multi-protocol mode number of active connections / with multi-protocol mode performance data / PROFINET communication / as PN IO device product function / PROFINET IO device product functions / management, configuration, engineering product function / MIB support protocol / is supported o SNMP v1 OCP LLDP ves configuration software o required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0 identification & maintenance function	
of the address range of the outputs / per DP slave performance data / S7 communication number of possible connections / for S7 communication o maximum 32 performance data / multi-protocol mode number of active connections / with multi-protocol mode number of active connections / with multi-protocol mode performance data / PROFINET communication / as PN IO device product function / PROFINET IO device product functions / management, configuration, engineering product function / MIB support protocol / is supported o SNMP v1 ODCP LLDP ves configuration software o required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0	
performance data / S7 communication number of possible connections / for S7 communication • maximum performance data / multi-protocol mode number of active connections / with multi-protocol mode performance data / PROFINET communication / as PN IO device product function / PROFINET IO device product function / MIB support product function / MIB support protocol / is supported • SNMP v1 • DCP • LLDP configuration software • required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0	
number of possible connections / for S7 communication • maximum 32 performance data / multi-protocol mode number of active connections / with multi-protocol mode performance data / PROFINET communication / as PN IO device product function / PROFINET IO device product functions / management, configuration, engineering product function / MIB support protocol / is supported • SNMP v1 • DCP • LLDP configuration software • required • STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0	_
number of active connections / with multi-protocol mode number of active connections / with multi-protocol mode performance data / PROFINET communication / as PN IO device product function / PROFINET IO device product functions / management, configuration, engineering product function / MIB support protocol / is supported • SNMP v1 • DCP • LLDP Configuration software • required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0	
number of active connections / with multi-protocol mode performance data / PROFINET communication / as PN IO device product function / PROFINET IO device product functions / management, configuration, engineering product function / MIB support yes protocol / is supported SNMP v1 DCP LLDP Yes LLDP Yes configuration software required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0	
performance data / PROFINET communication / as PN IO device product function / PROFINET IO device product functions / management, configuration, engineering product function / MIB support Yes protocol / is supported • SNMP v1 • DCP • LLDP **Yes • LLDP **Yes configuration software • required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0	
product function / PROFINET IO device product functions / management, configuration, engineering product function / MIB support Protocol / is supported SNMP v1 DCP LLDP LLDP Yes configuration software required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0	
product functions / management, configuration, engineering product function / MIB support protocol / is supported SNMP v1 DCP LLDP LLDP yes LLDP configuration software required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0	
product function / MIB support protocol / is supported SNMP v1 DCP LLDP Yes LLDP Yes configuration software required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0	
protocol / is supported SNMP v1 DCP Yes LLDP Yes LLDP Yes configuration software required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0	
SNMP v1 DCP Yes LLDP Yes configuration software required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0 identification & maintenance function	
DCP Yes LLDP Yes configuration software required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0 identification & maintenance function	
● LLDP Configuration software ● required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0 identification & maintenance function	
configuration software • required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0 identification & maintenance function	
• required STEP 7 as of V5.5 SP4 HF11 and HSP, STEP 7 Professional as of V1 V9.0, PCS neo as of V3.0, PNI as of V1.0 identification & maintenance function	
V9.0, PCS neo as of V3.0, PNI as of V1.0 identification & maintenance function	
identification & maintenance function	5, PCS7
• I&M0 - device-specific information Yes	
• I&M1 - higher level designation/location designation Yes	
• I&M2 - installation date Yes	
• I&M3 - comment Yes	
product functions / routing	
service / as PROFIBUS / data set routing Yes	
number of possible connections / with data set routing / 32	
maximum	
product functions / redundancy	
product function	
• ring redundancy Yes	
product function	
of the PROFINET IO device / is supported / PROFINET No	
system redundancy	
protocol / is supported / Media Redundancy Protocol (MRP) Yes	
product functions / time	
product function / pass on time synchronization Yes	
protocol / is supported	
• NTP Yes	
SIMATIC time synchronization (SIMATIC Time) Yes	
standards, specifications, approvals / hazardous environments	
certificate of suitability / CCC / for hazardous zone according to Yes	
GB standard	
as marking Ex nA IIC T4 Gc	
accessories	
accessories Optional: C-PLUG, BusAdapter of the ET 200SP system	
further information / internet links	
internet link	

• to web page: selection aid TIA Selection Tool

• to website: Industrial communication

• to website: Industry Mall

• to website: Information and Download Center

• to website: Image database

to website: CAx-Download-Managerto website: Industry Online Support

http://www.siemens.com/tia-selection-tool http://www.siemens.com/simatic-net

https://mall.industry.siemens.com

https://new.siemens.com/global/de/produkte/automatisierung/industrielle-

kommunikation.html

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. 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)

last modified:

8/18/2023