SIEMENS

Data sheet



SIPLUS PN/CAN link TX rail based on 6BK1620-0AA00-0AA0 with conformal coating, -40...+70 °C, OT4 with ST1/2 (+85 °C for 10 minutes), module PROFINET to CAN or CANopen Fieldbus CAN 2.0 A/B CANopen Manager or Slave according to CiA301/302 IP20

General information	General information		
Product type designation	PN/CAN Link		
Firmware version			
FW update possible	Yes		
Vendor identification (VendorID)	ID 09 00 00 53h acc. to CiA		
Engineering with			
 STEP 7 TIA Portal configurable/integrated from version 	see entry ID: 109746275		
Installation type/mounting			
Mounting	DIN rail, wall mounting, portrait mounting		
Mounting position	any		
Recommended mounting position	Horizontal		
Rail mounting	Yes		
Control cabinet installation	Yes		
Supply voltage			
Type of supply voltage	DC		
Rated value (DC)	24 V		
permissible range, lower limit (DC)	20.4 V		
permissible range, upper limit (DC)	28.8 V		
Reverse polarity protection	Yes		
Overvoltage protection	Yes		
Short-circuit protection	Yes		
Mains buffering			
 Mains/voltage failure stored energy time 	10 ms		
Input current			
Current consumption (rated value)	0.09 A		
Current consumption, max.	0.11 A		
Power loss			
Power loss, typ.	2.2 W		
Interfaces			
Interfaces/bus type	2x Ethernet (RJ45), 1x Sub-D (9-pin)		
Supports protocol for PROFINET IO			
 automatic detection of transmission rate 	No		
 Transmission rate, max. 	100 Mbit/s		
 Number of RJ45 ports 	2		
 Number of FC (FastConnect) connections 	2		
PROFINET functions			
Assignment of the IP address, supported	Yes		
Assignment of the device name, supported	Yes		
1. Interface			
Interface type	CAN according to CiA 303-1		

leatenal	Vec: 500 V AC or 707 V DC
Isolated Interface types	Yes; 500 V AC or 707 V DC
Interface types	1
Number of ports	
Design of the connection	9-pin sub D socket
CAN	CAN Observe CAN CAN CAN DANGER Manager Manager / Observe and As Oil
CAN operating modes	CAN Standard CAN 2.0A/B; CANopen Manager / Slave acc. to CiA
Specification acc. to CiA	CiA 301 & CiA 302
Transmission rate, min.	50 kbit/s
Transmission rate, max.	1 000 kbit/s
Number of slaves, max.	126
Number of SDOs in parallel	16; Parallel
Number of PDOs	512; Send / receive
Services	
— Node/life-guarding	Yes
— Heartbeat	Yes
— SYNC	Yes
2. Interface	
Interface type	PROFINET
Isolated	Yes; 1 500 V AC or 2 250 V DC
Interface types	
• RJ 45 (Ethernet)	Yes
 Number of ports 	2
integrated switch	Yes
Protocols	
PROFINET IO Device	Yes
Interrupts/diagnostics/status information	
Status indicator	Yes
Alarms	Yes
Diagnostics function	Yes
Diagnostics indication LED	
• RUN LED	Yes
• ERROR LED	Yes
MAINT LED	Yes
• LINK LED	Yes
• RX/TX LED	Yes
Potential separation	
Potential separation exists	Yes
Isolation	
Isolation tested with	750 V DC (type test) and according to EN 50155 (routine test)
	750 V DC (type test) and according to EN 30133 (foutilite test)
Degree and class of protection	IDOO
IP degree of protection	IP20
Standards, approvals, certificates	
Railway application	
• EN 50121-3-2	Yes; EMC for rail vehicles
• EN 50121-4	Yes; EMC for signal and telecommunications systems
• EN 50124-1	Yes; Railway applications - overvoltage category OV2; pollution degree PD2; rated surge voltage UNi = 0.5 kV; UNm = 24 V DC
● EN 50125-1	Yes; Rail vehicles - see ambient conditions
• EN 50125-2	Yes; Stationary electrical equipment - see ambient conditions
● EN 50125-3	Yes; Signal and telecommunications systems - see ambient conditions; vibrations and shocks: Application point outside of tracks (1 m to 3 m away from track)
● EN 50155	Yes; Rail vehicles - temperature class OT4, ST1/ST2, horizontal mounting position
● EN 61373	Yes; Rail vehicles - vibrations and shocks: Category 1 Class A/B
• Fire protection acc. to EN 45545-2	Yes; For proof of conformity, see Service & Support
Ambient conditions	
Ambient temperature during operation	
Ambient temperature during operation • horizontal installation, min.	-40 °C; = Tmin (incl. condensation/frost)
	-40 °C; = Tmin (incl. condensation/frost) 70 °C; = Tmax; +85 °C for 10 min (OT4, ST1/ST2 acc. to EN 50155)

last modified:	11/2/2021 🗗
NOIE.	for use in railway applications, also observe the product information "SIPLUS extreme RAIL" A5E37661960A, Online Support article 109736776
Other Note:	for use in railway applications, also observe the product information "SIDLUS
Weight, approx.	212 g
Weights Weight approv	212.0
Depth	75 mm
Height	112 mm
Width	70 mm
Dimensions	70
Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC- CC-830A Dimensions	Yes; Conformal coating, Class A
Military testing according to MIL-I-46058C, Amendment 7 Qualification and Performance of Electrical Insulating	Yes; Discoloration of coating possible during service life
Electronic equipment on rolling stock acc. to EN 50155 Military testing according to Mil. L46058C. Amendment 7.	Yes; Class PC2 protective coating acc. to EN 50155:2017
Protection against fouling acc. to EN 60664-3 Electronic againment on rolling stock acc. to EN 50155	Yes; Type 1 protection
Coatings for printed circuit board assemblies acc. to EN 61086 Protection against fauling acc. to EN 60064.3	Yes; Class 2 for high reliability
Conformal coating	
 Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04 	* The supplied plug covers must remain in place over the unused interfaces during operation!
Remark	
 Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04 	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
 Against chemically active substances acc. to EN 60654-4 	Yes; Class 3 (excluding trichlorethylene)
Usage in industrial process technology	
 to mechanically active substances according to EN 60721-3-5 	Yes; Class 5S3 incl. sand, dust; *
 to chemically active substances according to EN 60721-3-5 	Yes; Class 5C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
 to biologically active substances according to EN 60721-3-5 	Yes; Class 5B2 mold, fungus and dry rot spores (with the exception of fauna); Class 5B3 on request
Use on land craft, rail vehicles and special-purpose vehicles	
 to mechanically active substances according to EN 60721-3-3 	Yes; Class 3S4 incl. sand, dust, *
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
 to biologically active substances according to EN 60721-3-3 	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
Use in stationary industrial systems	
Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air
Coolants and lubricants	
Resistance	
With condensation, tested in accordance with IEC 60068- 2-38, max.	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation
Ambient air temperature-barometric pressure-altitude Relative humidity	Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m)
Installation altitude above sea level, max. Ambient of temperature becometric programs altitude.	
Altitude during operation relating to sea level	2 000 m
Max. Altitude during eneration relating to one level.	85 °C
• min.	-40 °C
Ambient temperature during storage/transportation	40.00
floor installation, max.	45 °C; = Tmax
• floor installation, min.	-40 °C; = Tmin
ceiling installation, max.	45 °C; = Tmax
• ceiling installation, min.	-40 °C; = Tmin
 vertical installation, max. 	55 °C; = Tmax