SIEMENS

Data sheet

6AG1964-2AA04-7AB0

SIPLUS S7-400 IF 964-DP -25...+70°C with conformal coating based on 6ES7964-2AA04-0AB0 . Interface module DP master



Figure similar

Current consumption, max.	150 mA; Current consumption from S7-400 bus: The module uses no current at 24 V, it provides this voltage only at the DP interface. Total current consumption of the components connected to the DP interface, but maximum 150 mA. Current carrying capacity of the isolated 5 V (P5ext) maximum 90 mA, current carrying capacity of the 24 V maximum 150 mA.
Power loss	
Power loss, typ.	1 W
Interfaces	
PROFIBUS DP	
Cable length, max.	1 200 m; At 9.6 kbit/s: max. 1 200 m; at 12 Mbit/s: max. 100 m
1. Interface	
Isolated	Yes
Protocols	
PROFIBUS DP master	Yes; Default setting

Yes

• PROFIBUS DP slave

Number of connections ● overall device-dependent Ambient conditions Ambient temperature during operation ● min. -25 °C; = Tmin ● max. 70 °C; = Tmax; @ 60°C for UL/ATEX/FM use Altitude during operation relating to sea level ● Installation altitude above sea level, max. 5 000 m ● Ambient air temperature-barometric pressurealtitude Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m)	PROFIBUS DP master	
Services - PG/OP communication - Equidistance - Equidistance - SYNC/FREEZE - Direct data exchange (slave-to-slave communication) Address area - Inputs, max Outputs, max.	Transmission rate, max.	12 Mbit/s
- PG/OP communication - Equidistance - Equidistance - SYNC/FREEZE - Direct data exchange (slave-to-slave communication) Address area - Inputs, max Outputs, max Outputs	Number of DP slaves, max.	125; depending on the CPU used
- Equidistance Yes Yes - SYNC/FREEZE Yes Yes - Direct data exchange (slave-to-slave communication) - Address area - Inputs, max. device-dependent device-dependent device-dependent - User data per DP slave - Inputs, max. 244 byte - Inputs, max. 244 byte - Unputs, max. 245 byte - Unputs, max. 246 byte - Unputs, max. 246 byte - Unputs, max. 247 byte - Unputs, max. 247 byte - Unputs, max. 248 byte - Unputs, max. 248 byte - Unputs, max. 249 byte - Unputs, max. 25 °C; = Tmin	Services	
- Equidistance Yes - SYNC/FREEZE Yes - Direct data exchange (slave-to-slave communication) Address area - Inputs, max. device-dependent device-dependent	— PG/OP communication	Yes
— SYNC/FREZE — Direct data exchange (slave-to-slave communication) Address area — Inputs, max. device-dependent — User data per DP slave — Inputs, max. 244 byte — Unputs, max. 244 byte — User data per DP slave — Inputs, max. 244 byte — Unputs, max. 244 byte — Outputs, max. 244 byte - Outputs, max. 244 byte - Outputs, max. 245 byte — Inputs, max. 246 byte — Inputs, max. 246 byte — Inputs, max. 247 byte — Unputs, max. 247 byte — Unputs, max. 248 byte - Outputs, max. 248 byte - Outputs, max. 249 byte - Outputs, max. 250 mmunication functions Number of connections • Overall - O	— Equidistance	Yes
Direct data exchange (slave-to-slave communication) Address area Inputs, max. Outputs, max. Outputs, max. Discretate per DP slave Inputs, max. Outputs, max. Outputs, max. 244 byte Inputs, max. Outputs, max. Overall Advice-dependent Ambient conditions Ambient temperature during operation Inin. Ini	— Equidistance	Yes
communication) Address area — Inputs, max. — Outputs, max. —	— SYNC/FREEZE	Yes
Inputs, max Outputs, max		Yes
— Outputs, max. User data per DP slave — Inputs, max. — Outputs, max. 244 byte 200	Address area	
User data per DP slave — Inputs, max. — Outputs, max. — Outpu	— Inputs, max.	device-dependent
— Inputs, max. — Outputs, max. 244 byte Communication functions Number of connections • overall Marbient conditions Ambient temperature during operation • min. • max. 70 °C; = Tmin 70 °C; = Tmax; @ 60°C for UL/ATEX/FM use Altitude during operation relating to sea level • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-altitude Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-altitude Relative humidity • With condensation, tested in accordance with IEC 60068-2-38, max. Resistance Use in statitionary industrial systems — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3	— Outputs, max.	device-dependent
Outputs, max. 244 byte Communication functions Number of connections ● overall device-dependent Ambient conditions Ambient temperature during operation ● min. ● max. Altitude during operation relating to sea level ● Installation altitude above sea level, max. ● Ambient air temperature-barometric pressurealtitude ■ Installation altitude above sea level, max. ● Ambient air temperature-barometric pressurealtitude ■ Installation altitude above sea level, max. ● Ambient air temperature-barometric pressurealtitude ■ Installation altitude above sea level, max. ■ Ambient air temperature-barometric pressurealtitude ■ Installation altitude above sea level, max. ■ Ambient air temperature-barometric pressurealtitude ■ Installation altitude above sea level, max. ■ Installation altitude above sea level ■ Installation altitude abo	User data per DP slave	
Number of connections • overall device-dependent Ambient conditions Ambient temperature during operation • min. • max. Altitude during operation relating to sea level • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-altitude **Inim (Tmax - 10 K) at 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) **Relative humidity** • With condensation, tested in accordance with IEC 60068-2-38, max. **Resistance** Use in stationary industrial systems — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3	— Inputs, max.	244 byte
Number of connections • overall Ambient conditions Ambient temperature during operation • min. • max. Altitude during operation relating to sea level • Installation altitude above sea level, max. • Ambient air temperature-barometric pressurealtitude * Installation altitude above sea level, max. • Ambient air temperature-barometric pressurealtitude * Installation altitude above sea level, max. • Ambient air temperature-barometric pressurealtitude * Inim Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) *Relative humidity • With condensation, tested in accordance with IEC 60068-2-38, max. *Resistance Use in stationary industrial systems — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3	— Outputs, max.	244 byte
● overall Ambient conditions Ambient temperature during operation ● min. ● max. Altitude during operation relating to sea level ● Installation altitude above sea level, max. ● Ambient air temperature-barometric pressure-altitude ■ Installation altitude above sea level, max. ● Ambient air temperature-barometric pressure-altitude ■ Installation altitude above sea level, max. ● Ambient air temperature-barometric pressure-altitude ■ Installation altitude above sea level, max. ● Ambient air temperature-barometric pressure-altitude ■ Installation altitude above sea level ■ Installation altitude abov	Communication functions	
Ambient conditions Ambient temperature during operation • min. • max. Altitude during operation relating to sea level • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-altitude • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-altitude • With condensation, tested in accordance with IEC 60068-2-38, max. Resistance Use in stationary industrial systems — to biologically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3	Number of connections	
Ambient temperature during operation • min. • max. Altitude during operation relating to sea level • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-altitude • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-altitude • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-altitude • Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) Relative humidity • With condensation, tested in accordance with IEC 60068-2-38, max. Resistance Use in stationary industrial systems — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3	• overall	device-dependent
 min. max. Altitude during operation relating to sea level Installation altitude above sea level, max. Ambient air temperature-barometric pressurealtitude Mith condensation, tested in accordance with IEC 60068-2-38, max. Resistance Use in stationary industrial systems — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 	Ambient conditions	
 max. Altitude during operation relating to sea level Installation altitude above sea level, max. Ambient air temperature-barometric pressurealtitude Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) With condensation, tested in accordance with IEC 60068-2-38, max. Resistance Use in stationary industrial systems — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 Yes; Class 3S4 incl. sand, dust, * Yes; Class 3S4 incl. sand, dust, * 	Ambient temperature during operation	
Altitude during operation relating to sea level Installation altitude above sea level, max. Ambient air temperature-barometric pressure-altitude Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) Relative humidity With condensation, tested in accordance with IEC 60068-2-38, max. Resistance Use in stationary industrial systems — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 Yes; Class 3S4 incl. sand, dust, *	● min.	-25 °C; = Tmin
 Installation altitude above sea level, max. Ambient air temperature-barometric pressurealtitude Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) With condensation, tested in accordance with IEC 60068-2-38, max. Resistance Use in stationary industrial systems — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 Yes; Class 3S4 incl. sand, dust, * 	• max.	70 °C; = Tmax; @ 60°C for UL/ATEX/FM use
 Ambient air temperature-barometric pressureal lititude Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax - 20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) Relative humidity With condensation, tested in accordance with IEC 60068-2-38, max. Resistance Use in stationary industrial systems — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 Yes; Class 3S4 incl. sand, dust, * Yes; Class 3S4 incl. sand, dust, * 	Altitude during operation relating to sea level	
Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m) Relative humidity • With condensation, tested in accordance with IEC 60068-2-38, max. Resistance Use in stationary industrial systems — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3	 Installation altitude above sea level, max. 	5 000 m
● With condensation, tested in accordance with IEC 60068-2-38, max. Resistance Use in stationary industrial systems — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3	·	Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5
IEC 60068-2-38, max. in bedewed state) Resistance Use in stationary industrial systems — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3	Relative humidity	
Use in stationary industrial systems — to biologically active substances according to EN 60721-3-3 — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3		
 to biologically active substances according to EN 60721-3-3 to chemically active substances according to EN 60721-3-3 to mechanically 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 Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 3S4 incl. sand, dust, * 	Resistance	
to EN 60721-3-3 exception of fauna); Class 3B3 on request — to chemically active substances according to EN 60721-3-3 — to mechanically active substances according according to EN 60721-3-3 exception of fauna); Class 3B3 on request Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); * Yes; Class 3S4 incl. sand, dust, *	Use in stationary industrial systems	
to EN 60721-3-3 — to mechanically active substances according to EN 60721-3-3 52 (severity degree 3); * Yes; Class 3S4 incl. sand, dust, *		
according to EN 60721-3-3		
Use on ships/at sea		Yes; Class 3S4 incl. sand, dust, *
	Use on ships/at sea	

 to biologically active substances according to EN 60721-3-6 	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
 to chemically active substances according to EN 60721-3-6 	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
 to mechanically active substances according to EN 60721-3-6 	Yes; Class 6S3 incl. sand, dust; *
Remark	
 Note regarding classification of environmental conditions acc. to EN 60721 	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating	
 Coatings for printed circuit board assemblies acc. to EN 61086 	Yes; Class 2 for high availability
 Military testing according to MIL-I-46058C, Amendment 7 	Yes; Discoloration of coating possible during service life
 Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A 	Yes; Conformal coating, Class A
Dimensions	
Width	26 mm
Height	54 mm
Depth	130 mm
Weights	
Weight, approx.	65 g

12/29/2018

last modified: