## Data sheet

SIPLUS S7-1200 SB1223 2DI/2DO for medial exposure with conformal coating based on 6ES7223-0BD30-0XB0 . Digital input/output 2 DI 24 V DC/2 DO 24 V DC



General information	
Product type designation	SB 1223, DI 2x24 V DC/DQ 2x24 V DC
Supply voltage	
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Input current	
from backplane bus 5 V DC, typ.	50 mA
Output voltage	
Power supply to the transmitters	
<ul><li>Supply current, max.</li></ul>	4 mA; per channel
Power loss	
Power loss, typ.	1 W
Digital inputs	
Number of digital inputs	2; Current-sinking
• in groups of	1
Input characteristic curve in accordance with IEC	Yes
61131, type 1	

6AG1223-0BD30-4XB0

**PNAP** 

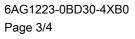
Number of simultaneously controllable inputs	
all mounting positions	
— up to 40 °C, max.	2
Input voltage	
Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	0 to 5 V
● for signal "1"	+15 to +30 V
Input current	
<ul> <li>for signal "0", max. (permissible quiescent current)</li> </ul>	1 mA
• for signal "1", typ.	0.5 A
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	Yes; 0.2 ms, 0.4 ms, 0.8 ms, 1.6 ms, 3.2 ms, 6.4 ms and 12.8 ms selectable in groups of four
— at "0" to "1", max.	2 μs
— at "1" to "0", max.	10 μs
for interrupt inputs	
— parameterizable	Yes
for technological functions	
— parameterizable	Yes
Cable length	
• shielded, max.	500 m
• unshielded, max.	300 m
igital outputs	
Number of digital outputs	2; MOSFET, solid-state (current-sinking/current-sourcing)
• in groups of	1
Short-circuit protection	No
Switching capacity of the outputs	
• with resistive load, max.	0.5 A
• on lamp load, max.	5 W
Load resistance range	
• upper limit	0.6 Ω
Output voltage	
• Rated value (DC)	24 V
• for signal "0", max.	0.1 V; with 10 kOhm load
● for signal "1", min.	20 V
o for signar i , min.	
Output current	
	0.5 A



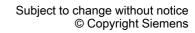
• shielded, max.	500 m
• unshielded, max.	150 m

Interrupts/diagnostics/status information	
Alarms	Yes
Diagnostics function	Yes
Diagnostics indication LED	
• for status of the inputs	Yes
<ul><li>for status of the outputs</li></ul>	Yes

• for status of the outputs	165	
Ambient conditions		
Free fall		
• Fall height, max.	0.3 m; five times, in product package	
Ambient temperature during operation		
• min.	-20 °C; = Tmin (incl. condensation/frost)	
• max.	60 °C; = Tmax	
Ambient temperature during storage/transportation		
• min.	-40 °C	
● max.	70 °C	
Altitude during operation relating to sea level		
• Installation altitude above sea level, max.	5 000 m	
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		
<ul> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> </ul>	100 %; RH incl. condensation/frost permitted (no commissioning in bedewed state)	
Resistance		
Coolants and lubricants		
<ul> <li>Resistant to commercially available coolants and lubricants</li> </ul>	Yes; Incl. diesel and oil droplets in the air	
Use in stationary industrial systems		
<ul> <li>to biologically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	
<ul> <li>to chemically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	
<ul> <li>to mechanically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3S4 incl. sand, dust, *	
Use on ships/at sea		
<ul> <li>to biologically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	
— to chemically active substances according	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-	



to EN 60721-3-6



52 (severity degree 3); \*

— to mechanically active substances	Yes; Class 6S3 incl. sand, dust; *
according to EN 60721-3-6	
Usage in industrial process technology	
<ul> <li>Against chemically active substances acc. to EN 60654-4</li> </ul>	Yes; Class 3 (excluding trichlorethylene)
<ul> <li>Environmental conditions for process,</li> </ul>	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas
measuring and control systems acc. to	concentrations up to the limits of EN 60721-3-3 class 3C4
ANSI/ISA-71.04	permissible); level LC3 (salt spray) and level LB3 (oil)
Remark	
<ul> <li>Note regarding classification of</li> </ul>	* The supplied plug covers must remain in place over the unused
environmental conditions acc. to EN 60721,	interfaces during operation!
EN 60654-4 and ANSI/ISA-71.04	
Conformal coating	
Coatings for printed circuit board assemblies     The access	Yes; Class 2 for high reliability
acc. to EN 61086	V + 4 + 1
<ul> <li>Protection against fouling acc. to EN 60664-3</li> </ul>	Yes; Type 1 protection
<ul> <li>Military testing according to MIL-I-46058C, Amendment 7</li> </ul>	Yes; Discoloration of coating possible during service life
<ul> <li>Qualification and Performance of Electrical</li> </ul>	Yes; Conformal coating, Class A
Insulating Compound for Printed Board	
Assemblies according to IPC-CC-830A	
Mechanics/material	
Enclosure material (front)	
• Plastic	Yes
B: .	
Dimensions	20 mm
Width	38 mm
Height	62 mm
Depth	21 mm

Depth	21 mm
Weights	
Weight, approx.	40 g

last modified: 10/13/2020

