

## SB 1222 digital output modules

### Overview

- Digital outputs as a supplement to the integral I/O of SIMATIC S7-1200 CPUs
- Can be plugged directly into the CPU

### Application

The SB 1222 digital output signal boards enable the digital signals of the controller to be output to the process.

### Design

The Signal Boards are plugged straight into the holder on the front of the S7-1200-CPU.

- Mounting:  
Signal Boards are plugged direct into the SIMATIC S7-1200-CPU and linked electrically and mechanically with the CPU in this way.
- The installation dimensions of the CPU remain unchanged.
- On all Signal Boards, replacement is facilitated by removable terminals ("permanent wiring").

### Function

The SB 1222 digital input/output signal board converts the internal signal level of the S7-1200 controller to the external signal level required for the process.

### Technical specifications

Article number	6ES7222-1AD30-0XB0 Signal Board SB1222, 4 DQ 5VDC 200KHz	6ES7222-1BD30-0XB0 Signal Board SB1222, 4 DQ 24VDC 200KHz
<b>General information</b>		
Product type designation	SB 1222, DQ 4x5 V DC 200 kHz	SB 1222, DQ 4x24 V DC 200 kHz
<b>Input current</b>		
from backplane bus 5 V DC, typ.	35 mA	35 mA
<b>Power loss</b>		
Power loss, typ.	0,5 W	0,5 W
<b>Digital outputs</b>		
Number of digital outputs	4; MOSFET, solid-state (current-sinking/current-sourcing)	4; MOSFET, solid-state (current-sinking/current-sourcing)
• in groups of	4	4
Short-circuit protection	No	No
<b>Switching capacity of the outputs</b>		
• with resistive load, max.	0.1 A	0.1 A
<b>Load resistance range</b>		
• upper limit	7 Ω	11 Ω
<b>Output voltage</b>		
• Rated value (DC)	5 V	24 V
• for signal "0", max.	0.2 V	1 V; with 10 kOhm load
• for signal "1", min.	L+ minus 0.7 V DC	L+ (-1.5 V)
• for signal "1", max.	6 V	
<b>Output current</b>		
• for signal "1" permissible range, max.	0.1 A	0.1 A
<b>Cable length</b>		
• shielded, max.	50 m	50 m
<b>Interrupts/diagnostics/status information</b>		
<b>Diagnostics indication LED</b>		
• for status of the outputs	Yes	Yes
<b>Standards, approvals, certificates</b>		
CE mark	Yes	Yes
CSA approval	Yes	Yes
UL approval	Yes	Yes
cULus	Yes	Yes
FM approval	Yes	Yes
RCM (formerly C-TICK)	Yes	Yes
KC approval	Yes	Yes
Marine approval	Yes	Yes
<b>Ambient conditions</b>		
<b>Free fall</b>		
• Fall height, max.	0.3 m; five times, in product package	0.3 m; five times, in product package
<b>Ambient temperature during operation</b>		
• min.	-20 °C	-20 °C
• max.	60 °C	60 °C
• horizontal installation, min.	-20 °C	-20 °C
• horizontal installation, max.	60 °C	60 °C
• vertical installation, min.	-20 °C	-20 °C
• vertical installation, max.	50 °C	50 °C
<b>Ambient temperature during storage/transportation</b>		

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	Signal Board SB1222, 4 DQ 5VDC 200KHz	Signal Board SB1222, 4 DQ 24VDC 200KHz
• min.	-40 °C	-40 °C
• max.	70 °C	70 °C
<b>Air pressure acc. to IEC 60068-2-13</b>		
• Storage/transport, min.	660 hPa	660 hPa
• Storage/transport, max.	1 080 hPa	1 080 hPa
<b>Relative humidity</b>		
• Operation at 25 °C without condensation, max.	95 %	95 %
<b>Mechanics/material</b>		
Enclosure material (front)		
• Plastic	Yes	Yes
<b>Dimensions</b>		
Width	38 mm	38 mm
Height	62 mm	62 mm
Depth	21 mm	21 mm
<b>Weights</b>		
Weight, approx.	35 g	35 g

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