



Figure similar

SIMATIC S7-1200, Digital I/O SB 1223, 2 DI/2 DO, 5V DC 200kHz

General information	
Product type designation	SB 1223, DI 2x5 V DC/DO 2x5 V DC 200 kHz
Input current	
from backplane bus 5 V DC, typ.	35 mA
Power loss	
Power loss, typ.	0.5 W
Digital inputs	
Number of digital inputs	2; Current-sourcing
• in groups of	2
Input voltage	
• Rated value (DC)	5 V
• for signal "0"	(L+ minus 1.0 V DC) ... L+
• for signal "1"	0 V ... (L+ minus 2.0 V DC)
Input current	
• for signal "0", max. (permissible quiescent current)	2.2 mA
• for signal "1", min.	5.1 mA
• for signal "1", typ.	15 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	Yes; 0.1 / 0.2 / 0.4 / 0.8 / 1.6 / 3.2 / 6.4 / 10.0 / 12.8 / 20.0 µs; 0.05 / 0.1 / 0.2 / 0.4 / 0.8 / 1.6 / 3.2 / 6.4 / 10.0 / 12.8 / 20.0 ms
for interrupt inputs	
— Parameterizable	Yes
for technological functions	
— Parameterizable	Yes
Cable length	
• shielded, max.	50 m; shielded, twisted pair
Digital outputs	
Number of digital outputs	2; MOSFET, solid-state (current-sinking/current-sourcing)
• in groups of	2
Short-circuit protection	No
Switching capacity of the outputs	
• with resistive load, max.	0.1 A
Load resistance range	
• upper limit	7 Ω
Output voltage	
• Rated value (DC)	5 V
• for signal "0", max.	0.2 V

<ul style="list-style-type: none">• for signal "1", min.• for signal "1", max.	L+ minus 0.7 V DC 6 V		
Output current			
<ul style="list-style-type: none">• for signal "1" rated value• for signal "1" permissible range, max.	0.1 A 0.1 A		
Cable length			
<ul style="list-style-type: none">• shielded, max.	50 m		
Interrupts/diagnostics/status information			
Diagnostics indication LED			
<ul style="list-style-type: none">• for status of the inputs• for status of the outputs	Yes Yes		
Standards, approvals, certificates			
CE mark	Yes		
CSA approval	Yes		
UL approval	Yes		
cULus	Yes		
FM approval	Yes		
RCM (formerly C-TICK)	Yes		
KC approval	Yes		
Marine approval	Yes		
Ambient conditions			
Free fall			
<ul style="list-style-type: none">• Fall height, max.	0.3 m; five times, in product package		
Ambient temperature during operation			
<ul style="list-style-type: none">• min.• max.• horizontal installation, min.• horizontal installation, max.• vertical installation, min.• vertical installation, max.	-20 °C 60 °C -20 °C 60 °C -20 °C 50 °C		
Ambient temperature during storage/transportation			
<ul style="list-style-type: none">• min.• max.	-40 °C 70 °C		
Air pressure acc. to IEC 60068-2-13			
<ul style="list-style-type: none">• Storage/transport, min.• Storage/transport, max.	660 hPa 1 080 hPa		
Relative humidity			
<ul style="list-style-type: none">• Operation at 25 °C without condensation, max.	95 %		
Mechanics/material			
Enclosure material (front) <ul style="list-style-type: none">• Plastic	Yes		
Dimensions			
Width	38 mm		
Height	62 mm		
Depth	21 mm		
Weights			
Weight, approx.	35 g		
Classifications			
		Version	Classification
	eClass	16	27-24-22-04
	eClass	14	27-24-22-04
	eClass	12	27-24-22-04
	eClass	9.1	27-24-22-04
	eClass	9	27-24-22-04
	eClass	8	27-24-22-04
	eClass	7.1	27-24-22-04
	eClass	6	27-24-22-04

ETIM	10	EC001419
ETIM	9	EC001419
ETIM	8	EC001419
ETIM	7	EC001419
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval



[Miscellaneous](#)

[Manufacturer Declaration](#)



General Product Approval

EMV

For use in hazardous locations



[China RoHS](#)

[Manufacturer Declaration](#)



For use in hazardous locations

Maritime application

[FM](#)



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[CCC-Ex](#)



Maritime application



[NK / Nippon Kaiji Kyokai](#)



[CCS \(China Classification Society\)](#)

Maritime application

[KR \(Korean Register of Shipping\)](#)

last modified: 7/2/2025