

SIMATIC S7-1200, Digital input SB 1221, 4 DI, 24 V DC 200 kHz,  
Sourcing input



Figure similar

General information	
Product type designation	SB 1221, DI 4x24 V DC 200 kHz
Input current	
from backplane bus 5 V DC, typ.	40 mA
Power loss	
Power loss, typ.	1 W
Digital inputs	
Number of digital inputs	4; Current-sourcing
• in groups of	4
Input voltage	
• Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	(L+ minus 5.0 V DC) ... L+ (1.4 ... 0 mA)
• for signal "1"	0 V ... (L+ minus 10 V DC (10 ... 2.9 mA))
Input current	

• for signal "0", max. (permissible quiescent current)	1.4 mA
• for signal "1", min.	2.9 mA
• for signal "1", typ.	7 mA
<b>Input delay (for rated value of input voltage)</b>	
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 $\mu$ s; 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
<b>Cable length</b>	
• shielded, max.	50 m; shielded, twisted pair
<b>Interrupts/diagnostics/status information</b>	
Diagnostics indication LED	
• for status of the inputs	Yes
<b>Standards, approvals, certificates</b>	
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
<b>Ambient conditions</b>	
Free fall	
• Fall height, max.	0.3 m; five times, in product package
Ambient temperature during operation	
• min.	-20 °C
• max.	60 °C
• horizontal installation, min.	-20 °C
• horizontal installation, max.	60 °C
• vertical installation, min.	-20 °C
• vertical installation, max.	50 °C
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Air pressure acc. to IEC 60068-2-13	
• Storage/transport, min.	660 hPa

• Storage/transport, max.	1 080 hPa
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#### Relative humidity

• Operation at 25 °C without condensation, max.	95 %
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#### Mechanics/material

Enclosure material (front)	
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• Plastic	Yes
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#### Dimensions

Width	38 mm
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Height	62 mm
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Depth	21 mm
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#### Weights

Weight, approx.	35 g
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<b>last modified:</b>	12/10/2019
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