

SIMATIC S7-1200, Digital input SB 1221, 4 DI, 5V DC 200kHz,  
Sourcing input



Figure similar

General information	
Product type designation	SB 1221, DI 4x5 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)	5 V
• for signal "0"	(L+ minus 1.0 V DC) ... L+ (2.2 ... 0 mA)
• for signal "1"	0 V ... (L+ minus 2.0 V DC (20 ... 5.1 mA))
Input current	

<ul style="list-style-type: none"> <li>• for signal "0", max. (permissible quiescent current)</li> </ul>	2.2 mA
<ul style="list-style-type: none"> <li>• for signal "1", min.</li> </ul>	5.1 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 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
<b>Cable length</b>	
<ul style="list-style-type: none"> <li>• shielded, max.</li> </ul>	50 m; shielded, twisted pair
<b>Interrupts/diagnostics/status information</b>	
Diagnostics indication LED	
<ul style="list-style-type: none"> <li>• for status of the inputs</li> </ul>	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	
<ul style="list-style-type: none"> <li>• Fall height, max.</li> </ul>	0.3 m; five times, in product package
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>• min.</li> </ul>	-20 °C
<ul style="list-style-type: none"> <li>• max.</li> </ul>	60 °C
<ul style="list-style-type: none"> <li>• horizontal installation, min.</li> </ul>	-20 °C
<ul style="list-style-type: none"> <li>• horizontal installation, max.</li> </ul>	60 °C
<ul style="list-style-type: none"> <li>• vertical installation, min.</li> </ul>	-20 °C
<ul style="list-style-type: none"> <li>• vertical installation, max.</li> </ul>	50 °C
Ambient temperature during storage/transportation	
<ul style="list-style-type: none"> <li>• min.</li> </ul>	-40 °C
<ul style="list-style-type: none"> <li>• max.</li> </ul>	70 °C
Air pressure acc. to IEC 60068-2-13	
<ul style="list-style-type: none"> <li>• Storage/transport, min.</li> </ul>	660 hPa
<ul style="list-style-type: none"> <li>• Storage/transport, max.</li> </ul>	1 080 hPa

Relative humidity	
• Operation at 25 °C without condensation, max.	95 %
Mechanics/material	
Enclosure material (front)	
• Plastic	Yes
Dimensions	
Width	38 mm
Height	62 mm
Depth	21 mm
Weights	
Weight, approx.	35 g
<b>last modified:</b>	02/13/2020