## **SIEMENS**

## **Data sheet**

## 6ES7321-1BH10-0AA0



SIMATIC S7-300, Digital input SM 321, isolated, 16 DI, 24 V DC, 1x 20-pole, 0.05 ms input delay

Figure similar

Supply voltage	
Load voltage L+	
Rated value (DC)	24 V
<ul> <li>permissible range, lower limit (DC)</li> </ul>	20.4 V
<ul> <li>permissible range, upper limit (DC)</li> </ul>	28.8 V
Input current	
from backplane bus 5 V DC, max.	110 mA
Power loss	
Power loss, typ.	3.8 W
Digital inputs	
Number of digital inputs	16
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Number of simultaneously controllable inputs	
horizontal installation	
— up to 40 °C, max.	16
— up to 60 °C, max.	16
vertical installation	
— up to 40 °C, max.	16
Input voltage	
<ul> <li>Type of input voltage</li> </ul>	DC
<ul><li>Rated value (DC)</li></ul>	24 V
• for signal "0"	-30 to +5 V
• for signal "1"	13 to 30V
Input current	
• for signal "1", typ.	7 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	No
— at "0" to "1", min.	25 μs
— at "0" to "1", max.	75 μs
— at "1" to "0", min.	25 μs
— at "1" to "0", max.	75 µs
Cable length	4.000
• shielded, max.	1 000 m
• unshielded, max.	600 m
Encoder	
Connectable encoders	

• 2-wire sensor	Yes	
<ul> <li>permissible quiescent current (2-wire sensor), max.</li> </ul>	1.5 mA	
Interrupts/diagnostics/status information		
Alarms	No	
Diagnostics function	No	
Alarms		
<ul> <li>Diagnostic alarm</li> </ul>	No	
Hardware interrupt	No	
Diagnostics indication LED		
<ul> <li>Status indicator digital input (green)</li> </ul>	Yes	
Potential separation		
Potential separation digital inputs		
<ul> <li>between the channels</li> </ul>	No	
<ul> <li>between the channels, in groups of</li> </ul>	16	
<ul> <li>between the channels and backplane bus</li> </ul>	Yes; Optocoupler	
Isolation		
Isolation tested with	500 V DC	
connection method / header		
required front connector	20-pin	
Dimensions		
Width	40 mm	
Height	125 mm	
Depth	120 mm	
Weights		
Weight, approx.	200 g	