

# SIEMENS

## Datasheet

6ES7321-1BH02-0AA0



SIMATIC S7-300, DIGITAL INPUT SM 321, OPTICALLY ISOLATED, 16DI, 24 V DC, 1 X 20 PIN

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• permissible range, lower limit (DC)	20.4 V
• permissible range, upper limit (DC)	28.8 V
Input current	
from backplane bus 5 V DC, max.	10 mA
Power loss	
Power loss, typ.	3.5 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
<b>vertical installation</b>	
— up to 40 °C, max.	16
<b>Input voltage</b>	
• Type of input voltage	DC
• Rated value, DC	24 V
• for signal "0"	-30 to +5 V
• for signal "1"	13 to 30 V
<b>Input current</b>	
• for signal "1", typ.	7 mA
<b>Input delay (for rated value of input voltage)</b>	
<b>for standard inputs</b>	
— parameterizable	No
— at "0" to "1", min.	1.2 ms
— at "0" to "1", max.	4.8 ms
<b>Cable length</b>	
• Cable length, shielded, max.	1 000 m
• Cable length unshielded, max.	600 m
<b>Encoder</b>	
<b>Connectable encoders</b>	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1.5 mA
<b>Isochronous mode</b>	
Isochronous mode (application synchronized up to terminal)	No
<b>Interrupts/diagnostics/status information</b>	
<b>Alarms</b>	
• Alarms	No
• Diagnostic alarm	No
• Hardware interrupt	No
<b>Diagnostic messages</b>	
• Diagnostic functions	No
<b>Diagnostics indication LED</b>	
• Status indicator digital input (green)	Yes
<b>Galvanic isolation</b>	

Galvanic isolation digital inputs	
• between the channels	No
• between the channels, in groups of	16
• between the channels and the backplane bus	Yes; Optocoupler

  

Permissible potential difference	
between different circuits	75 VDC / 60 VAC

  

Isolation	
Isolation tested with	500 V DC

  

Connection method	
required front connector	20-pin

  

Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm

  

Weights	
Weight, approx.	200 g
<b>last modified:</b>	31.07.2014