SIEMENS

Data sheet

6ES7321-1BL00-0AA0



SIMATIC S7-300, Digital input SM 321, Isolated 32 DI, 24 V DC, 1x 40-pole

Supply voltage	
Load voltage L+	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, lower limit (DC) permissible range, upper limit (DC)	28.8 V
Input current	20.0 V
from backplane bus 5 V DC, max.	15 mA
·	13 IIIA
Power loss	CEW
Power loss, typ.	6.5 W
Digital inputs	
Number of digital inputs	32
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Number of simultaneously controllable inputs	
horizontal installation	
— up to 40 °C, max.	32
— up to 60 °C, max.	16
vertical installation	
— up to 40 °C, max.	32
Input voltage	
 Type of input voltage 	DC
 Rated value (DC) 	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.	1.2 ms
— at "0" to "1", max.	4.8 ms
— at "1" to "0", min.	1.2 ms
— at "1" to "0", max.	4.8 ms
Cable length	
shielded, max.	1 000 m
• unshielded, max.	600 m
Encoder	

• 2-wire sensor — permissible quiescent current (2-wire sensor), max. Interrupts/diagnostics/status information Alarms No Diagnostics function Alarms • Diagnostic alarm • Diagnostic alarm • Hardware interrupt • Status indicator digital input (green) Potential separation Potential separation digital inputs • between the channels, in groups of between the channels, in groups of consection method Isolation tested with Sou V DC Connection method required front connector Width Height Depth Potential separation Yes Yes 1.5 mA	Connectable encoders		
Interrupts/diagnostics/status information Alarms No Diagnostics function No Alarms No - Diagnostic alarm No - Hardware interrupt No Diagnostics indication LED - Status indicator digital input (green) Yes Potential separation Potential separation digital inputs - between the channels No - between the channels and backplane bus Yes; Optocoupler Isolation Isolation tested with 500 V DC Connection method required front connector 40-pin Dimensions Width 40 mm Height 125 mm Depth 400 Weights		Ves	
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Potential separation digital inputs	 Status indicator digital input (green) 	Yes	
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Isolation tested with 500 V DC Connection method required front connector 40-pin Dimensions Width 40 mm Height 125 mm Depth 120 mm Weights	 between the channels and backplane bus 	Yes; Optocoupler	
required front connector 40-pin Dimensions Width 40 mm Height 125 mm Depth 120 mm Weights	Isolation		
required front connector 40-pin Dimensions Width 40 mm Height 125 mm Depth 120 mm Weights	Isolation tested with	500 V DC	
Dimensions Width 40 mm Height 125 mm Depth 120 mm Weights 120 mm	Connection method		
Width 40 mm Height 125 mm Depth 120 mm Weights 120 mm	required front connector	40-pin	
Height 125 mm Depth 120 mm Weights	Dimensions		
Depth 120 mm Weights	Width	40 mm	
Weights	Height	125 mm	
	Depth	120 mm	
W. 11	Weights		
vveignt, approx. 260 g	Weight, approx.	260 g	

12/16/2020 🗗

last modified: