



Figure similar

SIMATIC S7-300, Digital input SM 321, Isolated 16 DI, 24 V DC, Source input, 1x 20-pole

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
vertical installation	
— up to 40 °C, max.	16
Input voltage	
• Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	-5 to +30V
• 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	
Connectable encoders	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1.5 mA

Interrupts/diagnostics/status information					
Alarms	No				
Diagnostics function	No				
Alarms					
• 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, in groups of	16				
• between the channels and backplane bus	Yes; Optocoupler				
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				
Classifications					
		Version	Classification		
	eClass	14	27-24-22-04		
	eClass	12	27-24-22-04		
	eClass	9.1	27-24-22-04		
	eClass	9	27-24-22-04		
	eClass	8	27-24-22-04		
	eClass	7.1	27-24-22-04		
	eClass	6	27-24-22-04		
	ETIM	9	EC001419		
	ETIM	8	EC001419		
	ETIM	7	EC001419		
	IDEA	4	3566		
	UNSPSC	15	32-15-17-05		
Approvals / Certificates					
General Product Approval			EMV		
 EG-Konf.		Miscellaneous	 UL	 RCM	 EG-Konf.
EMV		For use in hazardous locations			
	 RCM	 ATEX	FM	 UL	 IECEX
For use in hazardous locations			Maritime application		



[Miscellaneous](#)

[CCC-Ex](#)



Maritime application



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