



SIMATIC S7-300, Digital input SM 321, Isolated 16 DI, 120/230 V AC, 1x 20-pole

Figure similar

Supply voltage	
Load voltage L1	
<ul style="list-style-type: none"> Rated value (AC) 	230 V; 120/230 V AC; all load voltages must have the same phase.
Input current	
from backplane bus 5 V DC, max.	29 mA
Power loss	
Power loss, typ.	4.9 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 style="list-style-type: none"> Type of input voltage Rated value (AC) for signal "0" for signal "1" 	AC 230 V 0 to 40V 79 to 264V
Input current	
<ul style="list-style-type: none"> for signal "1", typ. 	6.5 mA; (120 V, 60 Hz), 16 mA (230 V, 50 Hz)
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	No
— at "0" to "1", min.	25 ms
— at "0" to "1", max.	25 ms
— at "1" to "0", max.	25 ms
Cable length	
<ul style="list-style-type: none"> shielded, max. unshielded, max. 	1 000 m 600 m
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> 2-wire sensor 	Yes

— permissible quiescent current (2-wire sensor), max. 2 mA

Interrupts/diagnostics/status information

Alarms No

Diagnostics function No

Alarms

• Diagnostic alarm No

• Hardware interrupt No

Diagnostics indication LED

• Group error SF (red) No

• Status indicator digital input (green) Yes

Potential separation

Potential separation digital inputs

• between the channels No

• between the channels, in groups of 4

• between the channels and backplane bus Yes; Optocoupler

Isolation

Isolation tested with 4 000 V DC

Connection method

required front connector 20-pin

Dimensions

Width 40 mm

Height 125 mm

Depth 120 mm

Weights

Weight, approx. 240 g

last modified: 1/16/2021 