



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"> <li>Rated value (AC)</li> </ul>	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"> <li>Type of input voltage</li> <li>Rated value (AC)</li> <li>for signal "0"</li> <li>for signal "1"</li> </ul>	AC 230 V; 120/230 V AC (47 ... 63 Hz) 0 to 40V 79 to 264V
Input current	
<ul style="list-style-type: none"> <li>for signal "1", typ.</li> </ul>	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"> <li>shielded, max.</li> <li>unshielded, max.</li> </ul>	1 000 m 600 m
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> <li>2-wire sensor</li> </ul>	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 