

SIMATIC S7-300, DIGITAL INPUT SM 321, OPTICALLY ISOLATED  
16 DI, 120/230V AC, 1 X 20 PIN



Figure similar

<b>Load voltage L1</b>	
• Rated value (AC)	230 V; 120/230 V AC; all load voltages must have the same phase.
<b>Input current</b>	
from backplane bus 5 V DC, max.	29 mA
<b>Power loss</b>	
Power loss, typ.	4.9 W
<b>Digital inputs</b>	
Number of digital inputs	16
Input characteristic curve in accordance with IEC 61131, type 1	Yes
horizontal installation	
— up to 40 °C, max.	16
— up to 60 °C, max.	16
vertical installation	
— up to 40 °C, max.	16
<b>Input voltage</b>	
• Type of input voltage	AC

<ul style="list-style-type: none"> <li>• Rated value (AC)</li> <li>• for signal "0"</li> <li>• for signal "1"</li> <li>• Frequency range</li> </ul>	230 V; 120/230V AC 0 to 40V 79 to 264V 47 ... 63 Hz
<b>Input current</b>	
<ul style="list-style-type: none"> <li>• for signal "1", typ.</li> </ul>	6.5 mA; (120V, 60Hz), 16mA (230V, 50Hz)
<b>Input delay (for rated value of input voltage)</b>	
for standard inputs	
<ul style="list-style-type: none"> <li>— Parameterizable</li> <li>— at "0" to "1", min.</li> <li>— at "0" to "1", max.</li> </ul>	No 25 ms 25 ms
<b>Cable length</b>	
<ul style="list-style-type: none"> <li>• shielded, max.</li> <li>• unshielded, max.</li> </ul>	1 000 m 600 m
<b>Encoder</b>	
<b>Connectable encoders</b>	
<ul style="list-style-type: none"> <li>• 2-wire sensor</li> <li>— permissible quiescent current (2-wire sensor), max.</li> </ul>	Yes 2 mA
<b>Isochronous mode</b>	
Isochronous operation (application synchronized up to terminal)	No
<b>Interrupts/diagnostics/status information</b>	
<b>Alarms</b>	
<ul style="list-style-type: none"> <li>• Diagnostic alarm</li> <li>• Hardware interrupt</li> </ul>	No No
<b>Diagnostic messages</b>	
<ul style="list-style-type: none"> <li>• Diagnostic functions</li> </ul>	No
<b>Diagnostics indication LED</b>	
<ul style="list-style-type: none"> <li>• Group error SF (red)</li> <li>• Status indicator digital input (green)</li> </ul>	No Yes
<b>Potential separation</b>	
<b>Potential separation digital inputs</b>	
<ul style="list-style-type: none"> <li>• between the channels</li> <li>• between the channels, in groups of</li> <li>• between the channels and the backplane bus</li> </ul>	No 4 Yes; Optocoupler
<b>Isolation</b>	
Isolation tested with	4000 VDC
<b>Connection method</b>	
required front connector	20-pin

## Dimensions

Width	40 mm
Height	125 mm
Depth	120 mm

## Weights

Weight, approx.	240 g
-----------------	-------

**last modified:** 17.07.2015