

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

Supply voltage	
Load voltage L+	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> <li>permissible range, lower limit (DC)</li> <li>permissible range, upper limit (DC)</li> </ul>	24 V 20.4 V 28.8 V
Input current	
from backplane bus 5 V DC, max.	15 mA
Power loss	
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	
<ul style="list-style-type: none"> <li>Type of input voltage</li> <li>Rated value (DC)</li> <li>for signal "0"</li> <li>for signal "1"</li> </ul>	DC 24 V -30 to +5 V 13 to 30V
Input current	
<ul style="list-style-type: none"> <li>for signal "1", typ.</li> </ul>	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	
<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> <li>— permissible quiescent current (2-wire sensor), max.</li> </ul>	Yes 1.5 mA
Interrupts/diagnostics/status information	
Alarms	No
Diagnostics function	No
Alarms	
<ul style="list-style-type: none"> <li>Diagnostic alarm</li> <li>Hardware interrupt</li> </ul>	No No
Diagnostics indication LED	
<ul style="list-style-type: none"> <li>Status indicator digital input (green)</li> </ul>	Yes
Potential separation	
Potential separation digital inputs	
<ul style="list-style-type: none"> <li>between the channels</li> <li>between the channels, in groups of</li> </ul>	No 16

- between the channels and backplane bus

Yes; Optocoupler

#### Isolation

Isolation tested with

500 V DC

#### connection method / header

required front connector

40-pin

#### Dimensions

Width

40 mm

Height

125 mm

Depth

120 mm

#### Weights

Weight, approx.

260 g

**last modified:**

12/16/2020 