



SIMATIC S7-300, DIGITAL INPUT SM 321, OPTICALLY ISOLATED, 16DI, 24 V DC, 1 X 20 PIN

Figure similar

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 losses	
Power loss, typ.	3.5 W
Digital inputs	
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
Input voltage	
• Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	-30 to +5V
• for signal "1"	13 to 30V
Input current	

<ul style="list-style-type: none"> <li>• for signal "1", typ.</li> </ul>	7 mA
<b>Input delay (for rated value of input voltage)</b>	
for standard inputs	
<ul style="list-style-type: none"> <li>— Parameterizable</li> </ul>	No
<ul style="list-style-type: none"> <li>— at "0" to "1", min.</li> </ul>	1.2 ms
<ul style="list-style-type: none"> <li>— at "0" to "1", max.</li> </ul>	4.8 ms
<b>Cable length</b>	
<ul style="list-style-type: none"> <li>• shielded, max.</li> </ul>	1 000 m
<ul style="list-style-type: none"> <li>• Unshielded, max.</li> </ul>	600 m
<b>Encoder</b>	
Connectable encoders	
<ul style="list-style-type: none"> <li>• 2-wire sensor</li> </ul>	Yes
<ul style="list-style-type: none"> <li>— Permissible quiescent current (2-wire sensor), max.</li> </ul>	1.5 mA
<b>Isochronous mode</b>	
Isochronous operation (application synchronized up to terminal)	No
<b>Interrupts/diagnostics/status information</b>	
Alarms	
<ul style="list-style-type: none"> <li>• Alarms</li> </ul>	No
<ul style="list-style-type: none"> <li>• Diagnostic alarm</li> </ul>	No
<ul style="list-style-type: none"> <li>• Hardware interrupt</li> </ul>	No
Diagnostic messages	
<ul style="list-style-type: none"> <li>• Diagnostic functions</li> </ul>	No
Diagnostics indication LED	
<ul style="list-style-type: none"> <li>• Status indicator digital input (green)</li> </ul>	Yes
<b>Galvanic isolation</b>	
Galvanic isolation digital inputs	
<ul style="list-style-type: none"> <li>• between the channels</li> </ul>	No
<ul style="list-style-type: none"> <li>• between the channels, in groups of</li> </ul>	16
<ul style="list-style-type: none"> <li>• between the channels and the backplane bus</li> </ul>	Yes; Optocoupler
<b>Permissible potential difference</b>	
between different circuits	75V DC/60V AC
<b>Isolation</b>	
Isolation checked with	500 V DC
<b>Connection method</b>	
required front connector	20-pin
<b>Dimensions</b>	
Width	40 mm

Height	125 mm
Depth	120 mm
<b>Weights</b>	
Weight, approx.	200 g
<b>last modified:</b>	12.03.2015