

SIMATIC S7-300, DIGITAL INPUT SM 321, OPTICALLY ISOLATED, 16 DI, AC/DC 24 - 48V WITH ONE CHANNEL PER COMMON, 1 X 40 PIN



Figure similar

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• permissible range, lower limit (DC)	24 V
• permissible range, upper limit (DC)	48 V
Load voltage L1	
• Rated value (AC)	24 V
• permissible range, lower limit (AC)	24 V
• permissible range, upper limit (AC)	48 V
Input current	
from backplane bus 5 V DC, max.	100 mA
Power loss	
Power loss, typ.	1.5 W; at 24 V; 2,8 W at 48 V
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	
• Type of input voltage	AC/DC
• Rated value (DC)	24 V; DC 24 or 48 V
• Rated value (AC)	24 V; AC 24 or 48 V
• for signal "0"	-5V AC to +5V AC
• for signal "1"	14V AC to 60V AC
• Frequency range	0 to 63 Hz
Input current	
• for signal "1", typ.	2.7 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	No
— at "0" to "1", min.	16 ms
— at "0" to "1", max.	16 ms
— at "1" to "0", max.	16 ms
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1 mA
Isochronous mode	
Isochronous operation (application synchronized up to terminal)	No
Interrupts/diagnostics/status information	
Diagnostic functions	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
- between the channels, in groups of
- between the channels and backplane bus

Yes

1

Yes; Optocoupler

Permissible potential difference

between different circuits

170 V DC/120 V AC

Isolation

Isolation tested with

1500 V AC

Connection method

required front connector

40-pin

Dimensions

Width

40 mm

Height

125 mm

Depth

120 mm

Weights

Weight, approx.

260 g

last modified:

10/28/2016