



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

<b>Supply voltage</b>	
<b>Load voltage L+</b>	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
<b>Input current</b>	
from backplane bus 5 V DC, max.	10 mA
<b>Power loss</b>	
Power loss, typ.	3.5 W
<b>Digital inputs</b>	
Number of digital inputs	16
Input characteristic curve in accordance with IEC 61131, type 1	Yes
<b>Number of simultaneously controllable inputs</b>	
<b>horizontal installation</b>	
up to 40 °C, max.	16
up to 60 °C, max.	16
<b>vertical installation</b>	
up to 40 °C, max.	16

<b>Input voltage</b>	
Type of input voltage	DC
Rated value, DC	24 V
for signal "0"	-30 to +5 V
for signal "1"	13 to 30 V
<b>Input current</b>	
for signal "1", typ.	7 mA
<b>Input delay (for rated value of input voltage)</b>	
for standard inputs	
parameterizable	No
at "0" to "1", min.	1.2 ms
at "0" to "1", max.	4.8 ms
<b>Cable length</b>	
Cable length, shielded, max.	1000 m
Cable length unshielded, max.	600 m
<b>Encoder</b>	
Connectable encoders	
2-wire sensor	Yes
permissible quiescent current (2-wire sensor), max.	1.5 mA
<b>Isochronous mode</b>	
Isochronous mode (application synchronized up to terminal)	No
<b>Interrupts/diagnostics/status information</b>	
Alarms	
Alarms	No
Diagnostic alarm	No
Hardware interrupt	No
Diagnostic messages	
Diagnostic functions	No
Diagnostics indication LED	
Status indicator digital input (green)	Yes
<b>Galvanic isolation</b>	
Galvanic isolation digital inputs	
between the channels	No
between the channels, in groups of	16
between the channels and the backplane bus	Yes ; Optocoupler
<b>Permissible potential difference</b>	
between different circuits	75 VDC / 60 VAC
<b>Isolation</b>	

<b>Isolation tested with</b>	500 V DC
<b>Connection method</b>	
<b>required front connector</b>	20-pin
<b>Dimensions</b>	
<b>Width</b>	40 mm
<b>Height</b>	125 mm
<b>Depth</b>	120 mm
<b>Weights</b>	
<b>Weight, approx.</b>	200 g
Status	Jul 29, 2014