



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

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

<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