



SIMATIC S7-300, DIGITAL INPUT SM 321,  
OPTICALLY ISOLATED 16 DI, 120/230V AC,  
1 X 20 PIN

<b>Supply voltage</b>	
<b>Load voltage L1</b>	
<b>Rated value (AC)</b>	230 V ; 120/230 V AC; all load voltages must have the same phase.
<b>Input current</b>	
<b>from backplane bus 5 V DC, max.</b>	29 mA
<b>Power losses</b>	
<b>Power loss, typ.</b>	4.9 W
<b>Digital inputs</b>	
<b>Number of digital inputs</b>	16
<b>Input characteristic curve in accordance with IEC 61131, type 1</b>	Yes
<b>Number of simultaneously controllable inputs</b>	
<b>horizontal installation</b>	
<b>up to 40 °C, max.</b>	16
<b>up to 60 °C, max.</b>	16
<b>vertical installation</b>	
<b>up to 40 °C, max.</b>	16
<b>Input voltage</b>	
<b>Rated value, AC</b>	230 V ; 120/230 V AC

for signal "0"	0 to 40 V
for signal "1"	79 to 264 V
Frequency range	47 to 63 Hz
<b>Input current</b>	
for signal "1", typ.	6.5 mA ; (120V, 60Hz), 16mA (230V, 50Hz)
<b>Input delay (for rated value of input voltage)</b>	
<b>for standard inputs</b>	
Parameterizable	No
at "0" to "1", min.	25 ms
at "0" to "1", max.	25 ms
<b>Cable length</b>	
Cable length, shielded, max.	1000 m
Cable length unshielded, max.	600 m
<b>Encoder</b>	
<b>Connectable encoders</b>	
2-wire sensor	Yes
Permissible quiescent current (2-wire sensor), max.	2 mA
<b>Isochronous mode</b>	
Isochronous operation (application synchronized up to terminal)	No
<b>Interrupts/diagnostics/status information</b>	
<b>Alarms</b>	
Alarms	No
Diagnostic alarm	No
Hardware interrupt	No
<b>Diagnostic messages</b>	
Diagnostic functions	No
<b>Diagnostics indication LED</b>	
Group error SF (red)	No
Status indicator digital input (green)	Yes
<b>Galvanic isolation</b>	
<b>Galvanic isolation digital inputs</b>	
between the channels	No
between the channels, in groups of	4
between the channels and the backplane bus	Yes ; Optocoupler
<b>Isolation</b>	
Isolation checked with	4000 VDC
<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>	240 g
Status	Sep 2, 2013