



SIMATIC S7-300, Digital input SM 321, isolated, 8 DI, 120 V/230 V AC, 1x 40-pole, with single routing/channel

Figure similar

Supply voltage	
Load voltage L1	
<ul style="list-style-type: none"> Rated value (AC) 	230 V; 120/230 V AC; all load voltages must have the same phase.
Input current	
from backplane bus 5 V DC, max.	100 mA
Power loss	
Power loss, typ.	4.9 W
Digital inputs	
Number of digital inputs	8
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Number of simultaneously controllable inputs	
horizontal installation	
— up to 60 °C, max.	8
vertical installation	
— up to 40 °C, max.	8
Input voltage	
<ul style="list-style-type: none"> Type of input voltage Rated value (AC) for signal "0" for signal "1" 	AC 120 V; 120/230 V AC (47 ... 63 Hz) 0 to 40V 79 to 264V
Input current	
<ul style="list-style-type: none"> for signal "1", typ. 	7.5 mA; (120 V); 17.3 mA (230 V)
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	No
— at "0" to "1", max.	25 ms
— at "1" to "0", max.	25 ms
Cable length	
<ul style="list-style-type: none"> shielded, max. unshielded, max. 	1 000 m 600 m
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> 2-wire sensor — permissible quiescent current (2-wire sensor), max. 	Yes 2 mA
Interrupts/diagnostics/status information	
Alarms	
Diagnostics function	No
Alarms	
<ul style="list-style-type: none"> 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	Yes
• between the channels, in groups of	1
• between the channels and backplane bus	Yes; Optocoupler
Isolation	
Isolation tested with	1 500 V AC
connection method	
required front connector	40-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	240 g

	Version	Classification
eClass	14	27-24-22-04
eClass	12	27-24-22-04
eClass	9.1	27-24-22-04
eClass	9	27-24-22-04
eClass	8	27-24-22-04
eClass	7.1	27-24-22-04
eClass	6	27-24-22-04
ETIM	9	EC001419
ETIM	8	EC001419
ETIM	7	EC001419
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates	
General Product Approval	EMV



[Miscellaneous](#)

[Manufacturer Declaration](#)



For use in hazardous locations

[CCC-Ex](#)



Marine / Shipping



last modified:

3/12/2024