SIEMENS

Data sheet 6ES7321-1FF01-0AA0



Figure similar

*** spare part *** SIMATIC S7-300, digital input SM 321, isolated, 8 DI, 120 V/230 V AC, 1x 20-pole

General information	
Product function	
● Isochronous mode	No
Supply voltage	
Load voltage L1	
● Rated value (AC)	230 V; 120/230 V AC
Input current	
from backplane bus 5 V DC, max.	29 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	
● Type of input voltage	AC
● Rated value (AC)	230 V; 120/230 V AC (47 ... 63 Hz)
● for signal "0"	0 to 40V
● for signal "1"	79 to 264V
Input current	
● for signal "1", typ.	6.5 mA; (120 V); 11 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	
● shielded, max.	1 000 m
● unshielded, max.	600 m
Encoder	
Connectable encoders	
● 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	2 mA
Interrupts/diagnostics/status information	

Subject to change without notice
© Copyright Siemens

Alarms	No
Diagnostics function	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	No
● between the channels, in groups of	2
● between the channels and backplane bus	Yes; Optocoupler
Isolation	
Isolation tested with	4 000 V DC
Connection method	
required front connector	20-pin
Dimensions	
Width	40 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	240 g

Classifications

	Version	Classification
eClass	16	27-24-22-04
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	10	EC001419
ETIM	9	EC001419
ETIM	8	EC001419
ETIM	7	EC001419
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

Miscellaneous

China RoHS

General Product Approval	EMV	For use in hazardous locations	Maritime application
Manufacturer Declaration		FM	

Maritime application

Subject to change without notice
© Copyright Siemens







NK / Nippon Kaiji Kyokai




Maritime application

CCS (China Classification Society)

last modified: 3/13/2026

Subject to change without notice
© Copyright Siemens