

Data sheet

6ES7321-1FF10-0AA0



Figure similar

spare part SIMATIC S7-300, digital input SM 321, isolated, 8 DI, 120 V/230 V AC, 1x 40-pole, with single rooting/channel

General information	
Product function	
• Isochronous mode	No
Supply voltage	
Load voltage L1	
• 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	
• Type of input voltage	AC
• Rated value (AC)	120 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.	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	
• 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	

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	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
Classifications	

	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	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](#)

General Product Approval	EMV	For use in hazardous locations	Maritime application
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[China RoHS](#)[FM](#)**Maritime application**



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Maritime application

[CCS \(China Classification Society\)](#)

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