SIEMENS

Data sheet 6ES7421-1BL01-0AA0



SIMATIC S7-400, digital input SM 421, isolated 32 DI; 24 V DC

Input current	
from backplane bus 5 V DC, max.	20 mA
Power loss	
Power loss, typ.	6 W
Digital inputs	
Number of digital inputs	32
Input characteristic according to IEC 61131	Type 1
Number of simultaneously controllable inputs	
● Number of simultaneously controllable inputs	32
Input voltage	
● Type of input voltage	DC
● Rated value (DC)	24 V
● for signal "0"	-30 V DC to +5 V DC
● for signal "1"	13 V DC to 30 V DC
Input current	
● for signal "0", max. (permissible quiescent current)	1.3 mA
● for signal "1", typ.	7 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", min.	1.2 ms
— at "0" to "1", max.	4.8 ms
— at "1" to "0", min.	1.2 ms
— at "1" to "0", max.	4.8 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.	1.5 mA
Interrupts/diagnostics/status information	
Diagnostics function	No
Diagnostics indication LED	
● Status indicator digital input (green)	Yes
Potential separation	
Potential separation digital inputs	
● between the channels	No
● between the channels, in groups of	32
● between the channels and backplane bus	Yes

Subject to change without notice
© Copyright Siemes

Isolation	
Isolation tested with	500 V AC/707 V DC, type test
Dimensions	
Width	25 mm
Height	290 mm
Depth	210 mm
Weights	
Weight, approx.	500 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

General Product Approval | **EMV** | **For use in hazardous locations**

China RoHS | Miscellaneous | Manufacturer Declaration

For use in hazardous locations

FM | Type Examination Certificate

Maritime application

NK / Nippon Kaiji Kyokai

Maritime application

© Copyright Siemens





CCS (China Classification Society)

last modified: 10/23/2025

Subject to change without notice
© Copyright Siemes