

Data sheet

6ES7421-7BH00-0AB0

SIMATIC S7-400, DIG.INPUT MOD. SM 421, OPTIC. ISOLATED, 16 DI, 24V DC WITH 0,1 MS INPUT DELAY, ALARM, DIAGNOSTICS

Supply voltage	
Load voltage L+	
• Rated value (DC)	24 V
• permissible range, lower limit (DC)	20.4 V
• permissible range, upper limit (DC)	28.8 V
Input current	
from supply voltage L+, max.	120 mA
from backplane bus 5 V DC, max.	130 mA
Digital inputs	
Number of digital inputs	16
Input voltage	
• Rated value (DC)	24 V
• for signal "0"	-30 V DC to +5 V DC
• for signal "1"	11 V DC to 30 V DC
Input current	
• for signal "1", typ.	6 mA; 6 to 8 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	Yes; 0.1 / 0.5 / 3 ms
Cable length	
• shielded, max.	1 000 m; 1000 m: 3 ms, 70 m: 0.5 ms, 30 m: 0.1 ms
• unshielded, max.	600 m; 600 m: 3 ms; 50 m: 0.5 ms; 20 m: 0.1 ms
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	3 mA
Interrupts/diagnostics/status information	
Diagnostic functions	Yes; Parameterizable
Alarms	
• Diagnostic alarm	Yes
• Hardware interrupt	Yes
Potential separation	
Potential separation digital inputs	

- between the channels, in groups of
- between the channels and backplane bus

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Yes

Isolation

Isolation tested with	500 V DC
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Dimensions

Width	25 mm
Height	290 mm
Depth	210 mm

Weights

Weight, approx.	600 g
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last modified: 03/09/2018