SIEMENS

Data sheet

6ES7521-1FH00-0AA0



SIMATIC S7-1500, digital input module DI 16x230 V AC BA, 16 channels in groups of 4; Input delay 20 ms; Input type 1 (IEC 61131): Front connector (screw terminals or push-in) to be ordered separately

Figure similar

General information		
Product type designation	DI 16x230VAC BA	
HW functional status	FS01	
Firmware version	V2.0.0	
 FW update possible 	Yes	
Product function		
● I&M data	Yes; I&M0 to I&M3	
 Isochronous mode 	No	
 Prioritized startup 	Yes	
Engineering with		
 STEP 7 TIA Portal configurable/integrated from version 	V12 / V12	
 STEP 7 configurable/integrated from version 	V5.5 SP3 / -	
 PROFIBUS from GSD version/GSD revision 	V1.0 / V5.1	
 PROFINET from GSD version/GSD revision 	V2.3 / -	
Operating mode		
• DI	Yes	
Counter	No	
• MSI	Yes	
Power		
Power available from the backplane bus	1 W	
Power loss		
Power loss, typ.	4.9 W	
Digital inputs		
Number of digital inputs	16	
Digital inputs, parameterizable	No	
Source/sink input	P-reading	
Input characteristic curve in accordance with IEC 61131, type 1	Yes	
Input voltage		
 Rated value (AC) 	230 V; 120/230 V AC, 50/60 Hz	
• for signal "0"	0V AC to 40V AC	
• for signal "1"	79V AC to 264V AC	
Input current		
• for signal "1", typ.	11 mA; At 230 V AC and 5.5 mA at 120 V AC	
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
for interrupt inputs	
— parameterizable	No
for technological functions	
— parameterizable	No
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	Na
Diagnostics function	No
Alarms	Na
Diagnostic alarm Hardware interrupt	No No
Hardware interrupt	NO
Diagnoses • Monitoring the supply voltage	No
Wire-break	No
Short-circuit	No
Diagnostics indication LED	INO
RUN LED	Yes; green LED
• ERROR LED	Yes; red LED
Monitoring of the supply voltage (PWR-LED)	No
Channel status display	Yes; green LED
for channel diagnostics	No
for module diagnostics	Yes; red LED
Potential separation	163, 164 EED
Potential separation channels	
between the channels	No
between the channels, in groups of	4
between the channels and backplane bus	Yes
Permissible potential difference	165
between different circuits	250 V AC between the channels and the backplane bus; 500 V AC
between different circuits	between the channels
Isolation	
Isolation tested with	3 100 V DC
Standards, approvals, certificates	
Suitable for safety functions	No
Ambient conditions	140
Ambient temperature during operation	
horizontal installation, min.	0 °C
horizontal installation, max.	60 °C
vertical installation, min.	0 °C
vertical installation, max.	40 °C
Dimensions	
Width	35 mm
Height	147 mm 129 mm
Depth	123 11111
Weights warray	200 ~
Weight, approx.	300 g
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