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), 	2 mA
max.	
Interrupts/diagnostics/status information	
Diagnostics function	No
Alarms	
Diagnostic alarm	No
Hardware interrupt	No
Diagnoses	
 Monitoring the supply voltage 	No
Wire-break	No
Short-circuit	No
Diagnostics indication LED	
• 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	
Potential separation channels	Na
between the channels	No
between the channels, in groups of	4
• between the channels and backplane bus	Yes
Permissible potential difference	
between different circuits	250 V AC between the channels and the backplane bus; 500 V AC
	between the channels
Isolation	
Isolation tested with	3 100 V DC
Standards, approvals, certificates	
Suitable for safety functions	No
Ambient conditions	
Ambient temperature during operation	
 horizontal installation, min. 	0°0
 horizontal installation, max. 	60 °C
 vertical installation, min. 	0°0
 vertical installation, max. 	40 °C
Dimensions	
Width	35 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	300 g
woight, approx.	500 g
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