## 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
<ul> <li>FW update possible</li> </ul>	Yes
Product function	
● I&M data	Yes; I&M0 to I&M3
<ul> <li>Isochronous mode</li> </ul>	No
Prioritized startup	Yes
Engineering with	
<ul> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul>	V12 / V12
<ul> <li>STEP 7 configurable/integrated from version</li> </ul>	V5.5 SP3 / -
<ul> <li>PROFIBUS from GSD version/GSD revision</li> </ul>	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	
<ul> <li>Rated value (AC)</li> </ul>	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
<ul> <li>permissible quiescent current (2-wire sensor), max.</li> </ul>	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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