## SIEMENS

## Data sheet

## 6ES7521-1BH50-0AA0



SIMATIC S7-1500, digital input module DI 16x24 V DC BA, sourcing input; 16 channels in groups of 16; Input delay 3.2 ms; Input type 3 (IEC 61131): Front connector (screw terminals or push-in) to be ordered separately

Figure similar

General information	
Product type designation	DI 16x24VDC SRC 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
<ul> <li>Prioritized startup</li> </ul>	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
<ul> <li>PROFINET from GSD version/GSD revision</li> </ul>	V2.3 / -
Operating mode	
• DI	Yes
Counter	No
• MSI	Yes
Supply voltage	
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Power	
Power available from the backplane bus	0.9 W
Power loss	
Power loss, typ.	2.8 W
Digital inputs	
Number of digital inputs	16
Digital inputs, parameterizable	No
Source/sink input	Sourcing
Input characteristic curve in accordance with IEC 61131, type 3	Yes
Input voltage	
Rated value (DC)	24 V
• for signal "0"	-5 to +30V
● for signal "1"	-11 to -30V
Input current	
● for signal "1", typ.	4.5 mA

Input dolow (for rated value of input values)	
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	No
— at "0" to "1", min.	3 ms
— at "0" to "1", max.	4 ms
— at "1" to "0", min.	3 ms
— at "1" to "0", max.	4 ms
for interrupt inputs	
— parameterizable	No
for technological functions	
— parameterizable	No
Cable length	
<ul> <li>shielded, max.</li> </ul>	1 000 m
<ul> <li>unshielded, max.</li> </ul>	600 m
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor),	1.5 mA
max.	
Interrupts/diagnostics/status information	
Diagnostics function	No
Alarms	
Diagnostic alarm	No
Hardware interrupt	No
Diagnoses	
<ul> <li>Monitoring the supply voltage</li> </ul>	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	No
	NO
Potential separation	
Potential separation channels	
between the channels	No
<ul> <li>between the channels, in groups of</li> </ul>	16
<ul> <li>between the channels and backplane bus</li> </ul>	Yes
Isolation	
Isolation tested with	707 V DC (type test)
Standards, approvals, certificates	
Suitable for safety functions	No
Ambient conditions	
Ambient temperature during operation	
horizontal installation, min.	0 °C
<ul> <li>horizontal installation, max.</li> </ul>	60 °C
vertical installation, min.	0°C
<ul> <li>vertical installation, max.</li> </ul>	40 °C
Altitude during operation relating to sea level	
Installation altitude above sea level, max.	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
Dimensions	
Width	35 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	230 g
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