## 6ES7521-1BH10-0AA0

**Data sheet** 



SIMATIC S7-1500 Digital input module, DI 16x24 V DC BA, 16 channels in groups of 16, input delay typ. 3.2 ms, input type 3 (IEC 61131); Delivery incl. front connector Push-in

General information		
Product type designation	DI 16 x 24 V DC BA	
HW functional status	From FS01	
Firmware version	V1.0.0	
FW update possible	Yes	
Product function		
<ul> <li>I&amp;M data</li> </ul>	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>	V13 / V13	
<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		
Rated value (DC)	24 V	
permissible range, lower limit (DC)	19.2 V	
permissible range, upper limit (DC)	28.8 V	
Power		
Power available from the backplane bus	1.05 W	
Power loss		
Power loss, typ.	1.8 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 3	Yes	
Input voltage		
Rated value (DC)	24 V	
• for signal "0"	-30 to +5 V	
• for signal "1"	+11 to +30V	
Input current		
● for signal "1", typ.	2.7 mA	

Input dolay (for rated value of input voltage)	
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	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Encoder	
Connectable encoders	V
2-wire sensor	Yes
<ul> <li>permissible quiescent current (2-wire sensor), max.</li> </ul>	1.5 mA
Interrupts/diagnostics/status information	NI.
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
<ul> <li>Monitoring of the supply voltage (PWR-LED)</li> </ul>	No
Channel status display	Yes; green LED
for channel diagnostics	No
for module diagnostics	No
Potential separation	
Potential separation channels	
between the channels	No
between the channels, in groups of     between the channels and backglone bus	16 Voc
between the channels and backplane bus	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.	-30 °C; from FS04
horizontal installation, max.	60 °C
vertical installation, min.	-30 °C; from FS04
vertical installation, min.     vertical installation, max.	-50 °C, IIOIII FS04
	<del>1</del> 0 0
Altitude during operation relating to sea level	E 000 m. Doctrictions for installation allifundary 0 000 m.
Installation altitude above sea level, max.	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
Dimensions	
Width	25 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	230 g
Other	

Note:	Supplied incl. 40-pole push-in front connectors
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