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
 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
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 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	
• 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	
 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 	No
Potential separation	
Potential separation channels • between the channels	No
between the channels, in groups of	16
 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.	0°0
horizontal installation, max.	0°C
-	0°C
vertical installation, min.	40 °C
vertical installation, max.	40.0
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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