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	
■ 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 	V13 / V13
 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	
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
 permissible quiescent current (2-wire sensor), max. 	1.5 mA
Interrupts/diagnostics/status information	NI.
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 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
	1 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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