SIEMENS

Data sheet	**6ES7521-1BL10-0AA0**

SIMATIC S7-1500 Digital input module, DI 32x24 V DC BA, 32 channels in groups of 16, Input delay typ. 3.2 ms, Input type 3 (IEC 61131); Delivery incl. front connector Push-in

Siemens EcoTech

General information	
Product type designation	DI 32x24VDC 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.	3 W
Digital inputs	
Number of digital inputs	32
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

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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), max.	1.5 mA	
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	
● between the channels and the power supply of the electronics	No	
Isolation		
Isolation tested with	707 V DC (type test)	
Standards, approvals, certificates		
Suitable for safety functions	No	
Ecological footprint		
● environmental product declaration	Yes	
Global warming potential		
— global warming potential, (total) [CO2 eq]	18.9 kg	
— global warming potential, (during production) [CO2 eq]	12.1 kg	
— global warming potential, (during operation) [CO2 eq]	7.66 kg	
— global warming potential, (after end of life cycle) [CO2 eq]	-1.02 kg	
product functions / security / header		
signed firmware update	No	
data integrity	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, max.	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	25 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	260 g
Other	
Note:	Supplied incl. 40-pole push-in front connectors

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