SIEMENS

Data sheet

6ES7521-7EH00-0AB0



SIMATIC S7-1500, digital input module DI 16x 24...125 V UC HF, 16 channels in groups of 1; input delay 0.05..20 ms; Input type 3 (IEC 61131); Diagnostics, hardware interrupts: Front connector (screw terminals or push-in) to be ordered separately

General information	
Product type designation	DI 16x24 125 V UC HF
HW functional status	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 SP1 / -
 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
Oversampling	No
• MSI	Yes
Power	
Power available from the backplane bus	1.2 W
Power loss	
Power loss, typ.	2.2 W; At 24 V DC; 6.0 W at 125 V AC
Digital inputs	
Number of digital inputs	16
Digital inputs, parameterizable	Yes
Source/sink input	Yes
Input characteristic curve in accordance with IEC 61131, type 3	Yes; At 24 V DC
Input voltage	
Rated value (DC)	24 V; 48 V, 125 V
Rated value (AC)	24 V; 48 V, 125 V (50 - 60 Hz)
 for signal "0" 	-5 +5 V
● for signal "1"	+11 +146 V
Input current	
● for signal "1", typ.	3 mA; At 24 V DC
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	Yes; 0.05 / 0.1 / 0.4 / 1.6 / 3.2 / 12.8 / 20 ms parameterizable with DC,

	20 mg fived with AC
	20 ms fixed with AC
— at "0" to "1", min.	0.05 ms
— at "0" to "1", max.	20 ms 0.05 ms
— at "1" to "0", min. — at "1" to "0", max.	20 ms
for interrupt inputs	20 1115
	Yes
— parameterizable for technological functions	165
— 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	Yes
Alarms	
Diagnostic alarm	Yes
Hardware interrupt	Yes
Diagnoses	
 Monitoring the supply voltage 	No
Wire-break	Yes; Το I < 550 μA
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 	Yes; red LED
 for module diagnostics 	Yes; red LED
Potential separation	
Potential separation channels	
 between the channels 	Yes
 between the channels, in groups of 	1
 between the channels and backplane bus 	Yes
Permissible potential difference	
between different circuits	146 V DC/132 V AC
Isolation	
Isolation tested with	2 000 V DC
Standards, approvals, certificates	
Suitable for safety functions	No
Ambient conditions	
Ambient temperature during operation	
horizontal installation, min.	0 °C
 horizontal installation, max. 	60 °C
 vertical installation, min. 	0°C
 vertical installation, max. 	40 °C
Dimensions	
Width	35 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	240 g
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