

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
<ul style="list-style-type: none"> FW update possible 	Yes
Product function	
<ul style="list-style-type: none"> I&M data 	Yes; I&M0 to I&M3
<ul style="list-style-type: none"> Isochronous mode 	No
<ul style="list-style-type: none"> Prioritized startup 	Yes
Engineering with	
<ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated from version 	V12 / V12
<ul style="list-style-type: none"> STEP 7 configurable/integrated from version 	V5.5 SP3 / -
<ul style="list-style-type: none"> PROFIBUS from GSD version/GSD revision 	V1.0 / V5.1
<ul style="list-style-type: none"> PROFINET from GSD version/GSD revision 	V2.3 / -
Operating mode	
<ul style="list-style-type: none"> DI 	Yes

• Counter	No
• MSI	Yes
Supply voltage	
permissible range, lower limit (DC)	20.4 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
— 24 V DC	Yes
• 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), max.	1.5 mA
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Interrupts/diagnostics/status information

Diagnostics function	No
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Alarms

- | | |
|----------------------|----|
| • Diagnostic alarm | No |
| • Hardware interrupt | No |

Diagnostic messages

- | | |
|---------------------------------|----|
| • 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)
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Standards, approvals, certificates

Suitable for safety functions	No
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Ambient conditions

Ambient temperature during operation

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|---------------------------------|-------|
| • horizontal installation, min. | 0 °C |
| • horizontal installation, max. | 60 °C |
| • vertical installation, min. | 0 °C |
| • 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	35 mm
Height	147 mm
Depth	129 mm

Weights

Weight, approx.

230 g

last modified:

07/10/2020