

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

• Counter	No
• MSI	Yes
<b>Supply voltage</b>	
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
<b>Power</b>	
Power available from the backplane bus	0.9 W
<b>Power loss</b>	
Power loss, typ.	2.8 W
<b>Digital inputs</b>	
Number of digital inputs	16
Digital inputs, parameterizable	No
Source/sink input	Sourcing
Input characteristic curve in accordance with IEC 61131, type 3	Yes
<b>Input voltage</b>	
• Rated value (DC)	24 V
— 24 V DC	Yes
• for signal "0"	-5 to +30V
• for signal "1"	-11 to -30V
<b>Input current</b>	
• for signal "1", typ.	4.5 mA
<b>Input delay (for rated value of input voltage)</b>	
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
<b>Cable length</b>	
• shielded, max.	1 000 m
• unshielded, max.	600 m
<b>Encoder</b>	
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 |

#### 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)
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### Standards, approvals, certificates

Suitable for safety functions	No
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### 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 |

#### 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:**

09/14/2020