

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 as of version</li> </ul> | V12 / V12          |
| <ul style="list-style-type: none"> <li>STEP 7 configurable/integrated as of version</li> </ul>            | V5.5 SP3 / -       |
| <ul style="list-style-type: none"> <li>PROFIBUS as of GSD version/GSD revision</li> </ul>                 | V1.0 / V5.1        |
| <ul style="list-style-type: none"> <li>PROFINET as of 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        |
| • 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      |

## Interrupts/diagnostics/status information

Diagnostics function No

### 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)

## 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

### 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:

04/10/2020