

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 |
|---|--------|

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 |

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:

09/03/2020