SIEMENS

## Data sheet 6ES7521-1FH00-0AA0

SIMATIC S7-1500, Digital input module DI 16x230 V AC BO, 16 channels in groups of 4; input delay 20 ms; Input type 1 (IEC 61131)

Figure similar

| General information | |
|---|---|
| Product type designation | DI 16x230VAC BA |
| HW functional status | FS01 |
| Firmware version | V2.0.0 |
| • FW update possible | Yes |
| **Product function** | |
| • I&M data | Yes; I&M0 to I&M3 |
| **Engineering with** | |
| • STEP 7 TIA Portal configurable/integrated as of version | V12 / V12 |
| • STEP 7 configurable/integrated as of version | V5.5 SP3 / - |
| • PROFIBUS as of GSD version/GSD revision | V1.0 / V5.1 |
| • PROFINET as of GSD version/GSD revision | V2.3 / - |
| **Operating mode** | |
| • DI | Yes |
| • Counter | No |
| • MSI | Yes |

| | |
|---|---|
| **Power** | |
| Power available from the backplane bus | 1 W |
| **Power loss** | |
| Power loss, typ. | 4.9 W |
| **Digital inputs** | |
| Number of digital inputs | 16 |
| Digital inputs, parameterizable | No |
| Source/sink input | P-reading |
| Input characteristic curve in accordance with IEC 61131, type 1 | Yes |
| Input voltage | |
| • Type of input voltage | AC |
| • Rated value (AC) | 230 V; 120/230 V AC, 50/60 Hz |
| • for signal "0" | 0V AC to 40V AC |
| • for signal "1" | 79V AC to 264V AC |
| Input current | |
| • for signal "1", typ. | 11 mA; At 230 V AC and 5.5 mA at 120 V AC |
| Input delay (for rated value of input voltage) | |
| for standard inputs | |
| — parameterizable | No |
| — at "0" to "1", max. | 25 ms |
| — at "1" to "0", max. | 25 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. | 2 mA |
| **Isochronous mode** | |
| Isochronous operation (application synchronized up to terminal) | No |
| **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 | Yes; Red LED |

| | |
|---|---|
| **Potential separation** | |
| **Potential separation channels** | |
| • between the channels | No |
| • between the channels, in groups of | 4 |
| • between the channels and backplane bus | Yes |

| | |
|---|---|
| **Permissible potential difference** | |
| between different circuits | 250 V AC between the channels and the backplane bus; 500 V AC between the channels |

| | |
|---|---|
| **Isolation** | |
| Isolation tested with | 3 100 V DC |

| | |
|---|---|
| **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 |

| | |
|---|---|
| **Decentralized operation** | |
| Prioritized startup | Yes |

| | |
|---|---|
| **Dimensions** | |
| Width | 35 mm |
| Height | 147 mm |
| Depth | 129 mm |

| | |
|---|---|
| **Weights** | |
| Weight, approx. | 300 g |

**last modified:** 08/16/2018