SIEMENS

Data sheet

6ES7521-1BL10-0AA0



SIMATIC S7-1500, DIGITAL INPUT MODULE, DI32 X DC24V, 32 CHANNELS IN GROUPS OF 16; INPUT DELAY TYP. 3.2MS; INPUT TYPE 3 (IEC 61131) INCL. FRONT CONNECTOR PUSH-IN

Product type designation

| General information | |
|--|-------------------|
| HW functional status | E01 |
| Firmware version | V1.0.0 |
| Product function | |
| • I&M data | Yes; I&M0 to I&M3 |
| Engineering with | |
| STEP 7 TIA Portal can be configured/integrated as of version | V13 / V13 |
| STEP 7 can be configured/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 | |
| • MSI | Yes |
| Supply voltage | |
| Rated value (DC) | 24 V |
| permissible range, lower limit (DC) | 20.4 V |
| permissible range, upper limit (DC) | 28.8 V |
| Power | |
| Power available from the backplane bus | 1.05 W |
| Power losses | |
| Power loss, typ. | 3 W |

| Digital inputs | |
|--|-------------|
| Number of digital inputs | 32 |
| m/p-reading | p-reading |
| Input characteristic curve in accordance with IEC | Yes |
| 61131, type 3 | |
| Input voltage | |
| Type of input voltage | DC |
| Rated value (DC) | 24 V |
| ● for signal "0" | -30 to +5V |
| ● for signal "1" | +11 to +30V |
| Input current | |
| ● for signal "1", typ. | 2.7 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 |
| Cable length | |
| shielded, max. | 1 000 m |
| Unshielded, max. | 600 m |
| Encoder | |
| Connectable encoders | |
| • 2-wire sensor | Yes |
| — Permissible quiescent current (2-wire | 1.5 mA |
| sensor), max. | |
| Isochronous mode | |
| Isochronous operation (application synchronized up | No |
| to terminal) | |
| Interrupts/diagnostics/status information | |
| Alarms | |
| Diagnostic alarm | No |
| Hardware interrupt | No |
| Diagnostic messages | |
| Diagnostics | No |
| Monitoring the supply voltage | No |
| • Wire break | No |
| Short circuit | No |
| | |

| • Fuse blown | No |
|--|---|
| Diagnostics indication LED | |
| RUN LED | Yes; Green LED |
| • ERROR LED | Yes; Red LED |
| MAINT LED | No |
| Monitoring of the supply voltage (PWR-LED) | No |
| Channel status display | Yes; Green LED |
| for channel diagnostics | No |
| for module diagnostics | No |
| Galvanic isolation | |
| Electrical isolation channels | |
| between the channels | No |
| between the channels, in groups of | 16 |
| between the channels and the backplane bus | Yes |
| between the channels and the supply voltage of the electronics | No |
| | |
| Permissible potential difference | |
| Permissible potential difference between different circuits | 75 V DC/60 V AC (base isolation) |
| | 75 V DC/60 V AC (base isolation) |
| between different circuits | 75 V DC/60 V AC (base isolation) 707 V DC (type test) |
| between different circuits Isolation | |
| between different circuits Isolation Isolation checked with | |
| between different circuits Isolation Isolation checked with Decentralized operation | 707 V DC (type test) |
| between different circuits Isolation Isolation checked with Decentralized operation Prioritized startup Dimensions Width | 707 V DC (type test) Yes 25 mm |
| between different circuits Isolation Isolation checked with Decentralized operation Prioritized startup Dimensions Width Height | 707 V DC (type test) Yes 25 mm 147 mm |
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| between different circuits Isolation Isolation checked with Decentralized operation Prioritized startup Dimensions Width Height Depth Weights Weight, approx. | 707 V DC (type test) Yes 25 mm 147 mm 129 mm 260 g |
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