



SIMATIC S7-1500, digital input module DI 16x 24...125 V UC HF, 16 channels in groups of 1; input delay 0.05..20 ms; Input type 3 (IEC 61131); Diagnostics, hardware interrupts: Front connector (screw terminals or push-in) to be ordered separately

| General information | |
|--|---|
| Product type designation | DI 16x24 ... 125 V UC HF |
| HW functional status | FS01 |
| Firmware version | V1.0.0 |
| <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 | V13 SP1 / - |
| <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 |
| <ul style="list-style-type: none"> Counter | No |
| <ul style="list-style-type: none"> Oversampling | No |
| <ul style="list-style-type: none"> MSI | Yes |
| Power | |
| Power available from the backplane bus | 1.2 W |
| Power loss | |
| Power loss, typ. | 2.2 W; At 24 V DC; 6.0 W at 125 V AC |
| Digital inputs | |
| Number of digital inputs | 16 |
| Digital inputs, parameterizable | Yes |
| Source/sink input | Yes |
| Input characteristic curve in accordance with IEC 61131, type 3 | Yes; At 24 V DC |
| Input voltage | |
| <ul style="list-style-type: none"> Rated value (DC) | 24 V; 48 V, 125 V |
| <ul style="list-style-type: none"> Rated value (AC) | 24 V; 48 V, 125 V (50 - 60 Hz) |
| <ul style="list-style-type: none"> for signal "0" | -5 ... +5 V |
| <ul style="list-style-type: none"> for signal "1" | +11 ... +146 V |
| Input current | |
| <ul style="list-style-type: none"> for signal "1", typ. | 3 mA; At 24 V DC |
| Input delay (for rated value of input voltage) | |
| for standard inputs | |
| <ul style="list-style-type: none"> parameterizable | Yes; 0.05 / 0.1 / 0.4 / 1.6 / 3.2 / 12.8 / 20 ms parameterizable with DC, 20 ms fixed with AC |
| <ul style="list-style-type: none"> at "0" to "1", min. | 0.05 ms |

| | |
|---|--------------------|
| — at "0" to "1", max. | 20 ms |
| — at "1" to "0", min. | 0.05 ms |
| — at "1" to "0", max. | 20 ms |
| for interrupt inputs | |
| — parameterizable | Yes |
| 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 | Yes |
| Alarms | |
| • Diagnostic alarm | Yes |
| • Hardware interrupt | Yes |
| Diagnoses | |
| • Monitoring the supply voltage | No |
| • Wire-break | Yes; To I < 550 µA |
| • 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 | Yes; red LED |
| • for module diagnostics | Yes; red LED |
| Potential separation | |
| Potential separation channels | |
| • between the channels | Yes |
| • between the channels, in groups of | 1 |
| • between the channels and backplane bus | Yes |
| Permissible potential difference | |
| between different circuits | 146 V DC/132 V AC |
| Isolation | |
| Isolation tested with | 2 000 V DC |
| 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 |
| Dimensions | |
| Width | 35 mm |
| Height | 147 mm |
| Depth | 129 mm |
| Weights | |
| Weight, approx. | 240 g |

last modified: 1/15/2021 