

SIMATIC ET 200SP, DIGITAL INPUT MODULE, DI 8X 24VDC STANDARD, FITS TO BU-TYPE A0, COLOR CODE CC01, MODULE DIAGNOSIS



| General information | |
|---|----------------------------------|
| Product type designation | ET 200SP, DI 8x 24 V DC ST, PU 1 |
| Firmware version | V1.1 |
| <ul style="list-style-type: none"> FW update possible | Yes |
| usable BaseUnits | BU type A0 |
| Color code for module-specific color identification plate | CC01 |
| Product function | |
| <ul style="list-style-type: none"> I&M data | Yes; I&M0 to I&M3 |
| Engineering with | |
| <ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated as of version | V11 SP2 / V13 |
| <ul style="list-style-type: none"> STEP 7 configurable/integrated as of version | V5.5 SP3 / - |
| <ul style="list-style-type: none"> PCS 7 configurable/integrated as of version | V8.1 SP1 |
| <ul style="list-style-type: none"> PROFIBUS as of GSD version/GSD revision | GSD Revision 5 |
| <ul style="list-style-type: none"> PROFINET as of GSD version/GSD revision | GSDML V2.3 |
| Operating mode | |
| <ul style="list-style-type: none"> DI | Yes |
| <ul style="list-style-type: none"> Counter | No |

- Oversampling
- MSI

No

No

Supply voltage

| | |
|-------------------------------------|--------|
| Rated value (DC) | 24 V |
| permissible range, lower limit (DC) | 19.2 V |
| permissible range, upper limit (DC) | 28.8 V |
| Reverse polarity protection | Yes |

Input current

| | |
|---------------------------|-------|
| Current consumption, max. | 50 mA |
|---------------------------|-------|

Encoder supply

| | |
|-------------------------------------|-----------------|
| Number of outputs | 8 |
| Output voltage encoder supply, min. | 19.2 V |
| Short-circuit protection | Yes; per module |

24 V encoder supply

| | |
|--|---------------------------------------|
| <ul style="list-style-type: none"> • 24 V | Yes |
| <ul style="list-style-type: none"> • Short-circuit protection | Yes |
| <ul style="list-style-type: none"> • Output current, max. | 700 mA; Total current of all encoders |

Power loss

| | |
|------------------|-----|
| Power loss, typ. | 1 W |
|------------------|-----|

Address area

| | |
|--|-------------------------------------|
| Address space per module | |
| <ul style="list-style-type: none"> • Address space per module, max. | 1 byte; + 1 byte for QI information |

Hardware configuration

| | |
|---|---------------------------------|
| Selection of BaseUnit for connection variants | |
| <ul style="list-style-type: none"> • 1-wire connection | BU type A0 |
| <ul style="list-style-type: none"> • 2-wire connection | BU type A0 |
| <ul style="list-style-type: none"> • 3-wire connection | BU type A0 with AUX terminals |
| <ul style="list-style-type: none"> • 4-wire connection | BU type A0 + external terminals |

Digital inputs

| | |
|---|-----------|
| Number of digital inputs | 8 |
| Source/sink input | P-reading |
| Input characteristic curve in accordance with IEC 61131, type 1 | Yes |
| Input characteristic curve in accordance with IEC 61131, type 2 | No |
| Input characteristic curve in accordance with IEC 61131, type 3 | Yes |
| Pulse extension | No |

Input voltage

| | |
|---|----|
| <ul style="list-style-type: none"> • Type of input voltage | DC |
|---|----|

| | |
|--|---|
| <ul style="list-style-type: none"> • Rated value (DC) | 24 V |
| <ul style="list-style-type: none"> • for signal "0" | -30 to +5V |
| <ul style="list-style-type: none"> • for signal "1" | +11 to +30V |
| Input current | |
| <ul style="list-style-type: none"> • for signal "1", typ. | 2.5 mA |
| Input delay (for rated value of input voltage) | |
| for standard inputs | |
| — parameterizable | Yes; 0.05 / 0.1 / 0.4 / 0.8 / 1.6 / 3.2 / 12.8 / 20 ms (in each case + delay of 30 to 500 µs, depending on line length) |
| for interrupt inputs | |
| — parameterizable | No |
| for counter/technological functions | |
| — parameterizable | No |
| Cable length | |
| <ul style="list-style-type: none"> • shielded, max. | 1 000 m |
| <ul style="list-style-type: none"> • unshielded, max. | 600 m |
| Encoder | |
| Connectable encoders | |
| <ul style="list-style-type: none"> • 2-wire sensor | Yes |
| — permissible quiescent current (2-wire sensor), max. | 1.5 mA |
| Isochronous mode | |
| Isochronous operation (application synchronized up to terminal) | No |
| Interrupts/diagnostics/status information | |
| Diagnostics function | Yes |
| Alarms | |
| <ul style="list-style-type: none"> • Diagnostic alarm | Yes |
| Diagnostic messages | |
| <ul style="list-style-type: none"> • Diagnostic information readable | Yes |
| <ul style="list-style-type: none"> • Monitoring the supply voltage | Yes |
| — parameterizable | Yes |
| <ul style="list-style-type: none"> • Monitoring of encoder power supply | Yes; Module-wise |
| <ul style="list-style-type: none"> • Wire-break | Yes; Module-wise |
| <ul style="list-style-type: none"> • Short-circuit | Yes; Module-wise |
| Diagnostics indication LED | |
| <ul style="list-style-type: none"> • Monitoring of the supply voltage (PWR-LED) | Yes; green PWR LED |
| <ul style="list-style-type: none"> • Channel status display | Yes; Green LED |
| <ul style="list-style-type: none"> • for channel diagnostics | No |
| <ul style="list-style-type: none"> • for module diagnostics | Yes; green/red DIAG LED |
| Potential separation | |

Potential separation channels

- | | |
|--|-----|
| • between the channels | No |
| • between the channels and backplane bus | Yes |
| • between the channels and the power supply of the electronics | No |

Isolation

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|-----------------------|----------------------|
| Isolation tested with | 707 V DC (type test) |
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Dimensions

| | |
|--------|-------|
| Width | 15 mm |
| Height | 73 mm |
| Depth | 58 mm |

Weights

| | |
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| Weight, approx. | 28 g |
|-----------------|------|

last modified: 01/04/2017