

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



Figure similar

General information	
Product type designation	ET 200SP, DI 8x 24 V DC HF, PU 1
Firmware version	V2.0
• FW update possible	Yes
usable BaseUnits	BU type A0
Color code for module-specific color identification plate	CC01
Product function	
• I&M data	Yes; I&M0 to I&M3
Engineering with	
• STEP 7 TIA Portal configurable/integrated as of version	V13 SP1 / -
• STEP 7 configurable/integrated as of version	V5.5 / -
• PCS 7 configurable/integrated as of version	V8.1 SP1
• PROFIBUS as of GSD version/GSD revision	GSD Revision 5
• PROFINET as of GSD version/GSD revision	GSDML V2.3
Operating mode	

- DI
- Counter
- Oversampling
- MSI

Yes
No
No
Yes

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

Encoder supply

24 V encoder supply

- 24 V
- Short-circuit protection
- Output current, max.

Yes
Yes; per channel, electronic
700 mA; Per channel

Power loss

Power loss, typ.	1.5 W
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Address area

Address space per module

- Address space per module, max.

8 byte; 2 channels per submodule + QI information

Hardware configuration

Submodules

- Number of configurable submodules, max.

4

Selection of BaseUnit for connection variants

- 1-wire connection
- 2-wire connection
- 3-wire connection
- 4-wire connection

BU type A0
BU type A0
BU type A0 with AUX terminals
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	Yes; Pulse duration from 4 µs
• Length	2 s; 50 ms, 100 ms, 200 ms, 500 ms, 1 s, 2 s
Edge evaluation	Yes; rising edge, falling edge, edge change
Input voltage	

• Type of input voltage • Rated value (DC) • for signal "0" • for signal "1"	DC 24 V -30 to +5V +11 to +30V
Input current	
• 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	Yes
for counter/technological functions	
— parameterizable	No
Cable length	
• shielded, max. • unshielded, max.	1 000 m 600 m
Encoder	
Connectable encoders	
• 2-wire sensor — permissible quiescent current (2-wire sensor), max.	Yes 1.5 mA
Isochronous mode	
Isochronous operation (application synchronized up to terminal)	Yes
Filtering and processing time (TCI), min.	420 µs
Bus cycle time (TDP), min.	500 µs
Jitter, max.	8 µs
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm • Hardware interrupt	Yes; channel by channel Yes; Parameterizable, channels 0 to 7
Diagnostic messages	
• Diagnostic information readable • Monitoring the supply voltage — parameterizable • Monitoring of encoder power supply • Wire-break • Short-circuit	Yes Yes Yes Yes; channel by channel Yes; channel by channel Yes; channel by channel
Diagnostics indication LED	

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|--|-------------------------|
| • Monitoring of the supply voltage (PWR-LED) | Yes; green PWR LED |
| • Channel status display | Yes; Green LED |
| • for channel diagnostics | Yes; Red LED |
| • for module diagnostics | Yes; green/red DIAG LED |

Potential separation

Potential separation channels

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

Isolation

Isolation tested with	707 V DC (type test)
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Dimensions

Width	15 mm
Height	73 mm
Depth	58 mm

Weights

Weight, approx.	28 g
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last modified:	10/28/2016
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