

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
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	V11 SP2 / V13
STEP 7 configurable/integrated as of version	V5.5 SP3 / -
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	Yes
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
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Encoder supply

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

24 V encoder supply

• 24 V	Yes
• Short-circuit protection	Yes
• Output current, max.	700 mA; Total current of all encoders

Power loss

Power loss, typ.	1 W
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Address area

Address space per module	
• Address space per module, max.	1 byte; + 1 byte for QI information

Hardware configuration

Selection of BaseUnit for connection variants	
• 1-wire connection	BU type A0
• 2-wire connection	BU type A0
• 3-wire connection	BU type A0 with AUX terminals
• 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

• Type of input voltage	DC
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• Rated value (DC) • for signal "0" • for signal "1"	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	No
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)	No
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm	Yes
Diagnostic messages	
• Diagnostic information readable • Monitoring the supply voltage — parameterizable • Monitoring of encoder power supply • Wire-break • Short-circuit	Yes Yes Yes Yes; Module-wise Yes; Module-by-module, optional protective circuit for preventing wire-break diagnostics in the case of simple encoder contacts: 25 kOhm to 45 kOhm Yes; Module-wise
Diagnostics indication LED	
• Monitoring of the supply voltage (PWR-LED) • Channel status display • for channel diagnostics	Yes; green PWR LED Yes; Green LED No

- for module diagnostics

Yes; green/red DIAG LED

Potential separation

Potential separation channels

- between the channels
- between the channels and backplane bus
- between the channels and the power supply of the electronics

No

Yes

No

Isolation

Isolation tested with

707 V DC (type test)

Dimensions

Width

15 mm

Height

73 mm

Depth

58 mm

Weights

Weight, approx.

28 g

last modified:

08/12/2017