

Siemens
EcoTech



SIMATIC ET 200SP, digital input module, DI 8x 24 V DC High Speed, Pack quantity: 1 unit, three alternative operating modes: DI, Oversampling, 4x counters, suitable for BU type A0, Color code CC01

General information	
Product type designation	DI 8x24 V DC HS
HW functional status	from FS04
Firmware version	V1.0.2
<ul style="list-style-type: none"> FW update possible 	Yes
usable BaseUnits	BU type A0
Color code for module-specific color-coded label	CC01
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 	Yes; 125 µs
<ul style="list-style-type: none"> suitable for operation on PROFINET R1 IMs 	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"> PCS 7 configurable/integrated from version 	V10.0
<ul style="list-style-type: none"> PCS neo can be configured/integrated from version 	V3.1.1
<ul style="list-style-type: none"> PROFIBUS from GSD version/GSD revision 	One GSD file each, Revision 3 and 5 and higher
<ul style="list-style-type: none"> PROFINET from GSD version/GSD revision 	GSDML V2.3
Operating mode	
<ul style="list-style-type: none"> DI 	Yes
<ul style="list-style-type: none"> Counter 	Yes
<ul style="list-style-type: none"> Oversampling 	Yes
<ul style="list-style-type: none"> MSI 	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.	70 mA; without sensor supply
Encoder supply	
24 V encoder supply	
<ul style="list-style-type: none"> 24 V 	Yes
<ul style="list-style-type: none"> Short-circuit protection 	Yes; per module, electronic
<ul style="list-style-type: none"> Output current, max. 	700 mA
Power loss	

Power loss, typ.	1.5 W
Address area	
Address space per module	
<ul style="list-style-type: none"> Address space per module, max. Inputs Outputs 	45 byte 32 byte; 1 byte + 1 byte for QI information in DI mode; 32 bytes in Oversampling mode; 25 bytes in Counter mode 20 byte; In count mode
Hardware configuration	
Automatic encoding	Yes
<ul style="list-style-type: none"> Mechanical coding element Type of mechanical coding element 	Yes Type A
Selection of BaseUnit for connection variants	
<ul style="list-style-type: none"> 1-wire connection 2-wire connection 3-wire connection 4-wire connection 	BU type A0 BU type A0 BU type A0 with AUX terminals or potential distributor module BU type A0 + Potential distributor module
Digital inputs	
Number of digital inputs	8
Sourcing/sinking input	P-reading
Pulse extension	Yes
<ul style="list-style-type: none"> Length 	2 s; 50 ms, 100 ms, 200 ms, 500 ms, 1 s, 2 s
Digital input functions, parameterizable	
<ul style="list-style-type: none"> Gate start/stop Freely usable digital input Counter <ul style="list-style-type: none"> Number, max. Counting frequency, max. Counting width Counting direction up/down Digital input with oversampling <ul style="list-style-type: none"> Number, max. Values per cycle, max. Resolution, min. 	Yes Yes Yes 4 10 kHz 32 bit Yes Yes 8 32 7.8125 μ s
Input voltage	
<ul style="list-style-type: none"> Rated value (DC) for signal "0" for signal "1" 	24 V -30 to +5 V +11 to +30V
Input current	
<ul style="list-style-type: none"> for signal "1", typ. 	6 mA
Input delay (for rated value of input voltage)	
for standard inputs	
<ul style="list-style-type: none"> parameterizable 	Yes; none / 0.05 / 0.1 / 0.4 / 0.8 / 1.6 / 3.2 / 12.8 / 20 ms
for interrupt inputs	
<ul style="list-style-type: none"> parameterizable 	Yes
for technological functions	
<ul style="list-style-type: none"> parameterizable 	Yes
Cable length	
<ul style="list-style-type: none"> shielded, max. unshielded, max. 	50 m 50 m
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> 2-wire sensor permissible quiescent current (2-wire sensor), max. 	Yes 1.5 mA
Isochronous mode	
Bus cycle time (TDP), min.	125 μ s
Jitter, max.	5 μ s
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	

• Diagnostic alarm	Yes	
• Hardware interrupt	Yes	
Diagnoses		
• Diagnostic information readable	Yes	
• Monitoring the supply voltage	Yes	
— parameterizable	Yes	
• Monitoring of encoder power supply	Yes; module-wise	
• Wire break	No	
• Short-circuit	Yes; module-wise	
Diagnostics indication LED		
• Monitoring of the supply voltage (PWR-LED)	Yes; green PWR LED	
• Channel status display	Yes; green LED	
• for channel diagnostics	No	
• 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		
Isolation tested with	707 V DC (type test)	
Standards, approvals, certificates		
Suitable for safety functions	No	
Ecological footprint		
• environmental product declaration	Yes	
Global warming potential		
— global warming potential, (total) [CO2 eq]	15.9 kg	
— global warming potential, (during production) [CO2 eq]	3.69 kg	
— global warming potential, (during operation) [CO2 eq]	12.7 kg	
— global warming potential, (after end of life cycle) [CO2 eq]	-0.495 kg	
Ambient conditions		
Ambient temperature during operation		
• horizontal installation, min.	-30 °C; < 0 °C as of FS04	
• horizontal installation, max.	60 °C	
• vertical installation, min.	-30 °C; < 0 °C as of FS04	
• vertical installation, max.	50 °C	
Altitude during operation relating to sea level		
• Installation altitude above sea level, max.	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual	
Absolute humidity		
• dew point, min.	-60 °C; suitable for dry room applications	
Dimensions		
Width	15 mm	
Height	73 mm	
Depth	58 mm	
Weights		
Weight, approx.	28 g	
Classifications		
	Version	Classification
eClass	14	27-24-26-04
eClass	12	27-24-26-04
eClass	9.1	27-24-26-04
eClass	9	27-24-26-04
eClass	8	27-24-26-04
eClass	7.1	27-24-26-04

eClass	6	27-24-26-04
ETIM	10	EC001599
ETIM	9	EC001599
ETIM	8	EC001599
ETIM	7	EC001599
IDEA	4	3566
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval



[Miscellaneous](#)

[Manufacturer Declaration](#)



General Product Approval For use in hazardous locations



[China RoHS](#)



For use in hazardous locations

[FM](#)

[CCC-Ex](#)



[Type Examination Certificate](#)

[Miscellaneous](#)

For use in hazardous locations Maritime application

[CCC-Ex](#)



[NK / Nippon Kaiji Kyokai](#)

Maritime application Environment



[CCS \(China Classification Society\)](#)

[KR \(Korean Register of Shipping\)](#)



last modified:

3/10/2026