



SIMATIC ET 200SP, digital input module, DI 8x 24 V AC..48 V UC Basic, packing quantity: 1 unit, suitable for BU type U0, color code CC20, module diagnostics

General information	
Product type designation	DI 8x24VAC/48VUC BA
HW functional status	From FS02
Firmware version	V0.0
• FW update possible	No
usable BaseUnits	BU type U0
Product function	
• I&M data	Yes; I&M0 to I&M3
• Isochronous mode	No
• suitable for operation on PROFINET R1 IMs	Yes
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	V15
• STEP 7 configurable/integrated from version	V5.6
• PROFIBUS from GSD version/GSD revision	One GSD file each, Revision 3 and 5 and higher
• PROFINET from GSD version/GSD revision	GSDML V2.3
Operating mode	
• DI	Yes
• Counter	No
• Oversampling	No
• MSI	No
Supply voltage	
Rated value (DC)	48 V
permissible range, lower limit (DC)	40.8 V
permissible range, upper limit (DC)	57.6 V
Rated value (AC)	48 V; 24 V/48 V; 50 Hz/60 Hz
permissible range, lower limit (AC)	40.8 V
permissible range, upper limit (AC)	52.8 V
Reverse polarity protection	Yes
Input current	
Current consumption, max.	70 mA; without sensor supply
Encoder supply	
Number of outputs	8
Short-circuit protection	Yes; Per module, 5x 20 mm fuse, 2 A/250 V, quick-response, replaceable
Output current	
• up to 60 °C, max.	1 A
24 V encoder supply	

• 24 V	No
Power loss	
Power loss, typ.	1.5 W
Address area	
Address space per module	
• Address space per module, max.	1 byte
Hardware configuration	
Automatic encoding	
• Mechanical coding element	Yes
• Type of mechanical coding element	type C
Selection of BaseUnit for connection variants	
• 1-wire connection	BU type U0
• 2-wire connection	BU type U0
• 3-wire connection	BU type U0 + Potential distributor module
• 4-wire connection	BU type U0 + Potential distributor module
Digital inputs	
Number of digital inputs	8
Sourcing/sinking 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	No
Pulse extension	No
Input voltage	
• for signal "0"	AC/DC < 10 V
• for signal "1"	AC > 14 V, DC > 34 V
Input current	
• for signal "1", typ.	3.5 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	No
— at "0" to "1", max.	15 ms
— at "1" to "0", max.	20 ms
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm	Yes
Diagnoses	
• Diagnostic information readable	Yes
• Monitoring the supply voltage	Yes
• Monitoring of encoder power supply	Yes
• Group error	Yes
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	1 200 V DC between supply voltage and backplane bus
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
• horizontal installation, max.	60 °C
• vertical installation, min.	-30 °C
• vertical installation, max.	50 °C
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	2 000 m; On request: Installation altitudes greater than 2 000 m
Absolute humidity	
• dew point, min.	-60 °C; suitable for dry room applications
Dimensions	
Width	20 mm
Height	73 mm
Depth	58 mm
Weights	
Weight, approx.	40 g

	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



[Manufacturer Declaration](#)

[Miscellaneous](#)



General Product Approval For use in hazardous locations



[China RoHS](#)



EG-Konf.



UL

For use in hazardous locations

Maritime application

[EM](#)



ABS



BUREAU VERITAS



DNV



LRS

[NK / Nippon Kaiji Kyokai](#)

Maritime application

Environment



RINA

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

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



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last modified:

2/1/2026