



SIMATIC ET 200SP HA, digital input module, DI 32x24VDC HA, suitable for terminal block, H1, P0, color code CC00, channel diagnostics

General information	
Product type designation	DI 32x24VDC HA
Firmware version	V1.0
<ul style="list-style-type: none"> FW update possible 	Yes
Color code for module-specific color-coded label	CC00
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 from version 	V16
<ul style="list-style-type: none"> STEP 7 configurable/integrated from version 	V5.6
<ul style="list-style-type: none"> PCS 7 configurable/integrated from version 	V9.0
<ul style="list-style-type: none"> PCS neo can be configured/integrated from version 	V3.0
<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 	No
<ul style="list-style-type: none"> Oversampling 	No
<ul style="list-style-type: none"> MSI 	No
Redundancy	
<ul style="list-style-type: none"> Redundancy capability 	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 (rated value)	11.5 mA
Current consumption, max.	15 mA
Encoder supply	
Number of outputs	32; When terminal block with encoder supply is used (type P0)
Output voltage, min.	19.2 V
Short-circuit protection	Yes; When using TB type P0
Power loss	
Power loss, typ.	1.6 W; Max. 2.8 W (all inputs "1")
Address area	
Address space per module	

<ul style="list-style-type: none"> Address space per module, max. 	4 byte; + 4 bytes for QI information
Hardware configuration	
Automatic encoding	
<ul style="list-style-type: none"> Mechanical coding element 	Yes
Digital inputs	
Number of digital inputs	32
Digital inputs, parameterizable	Yes
Sourcing/sinking input	Yes; 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
Edge evaluation	Yes; rising edge, falling edge, edge change
Input voltage	
<ul style="list-style-type: none"> Rated value (DC) 	24 V
<ul style="list-style-type: none"> for signal "0" 	-30 to +5 V
<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	
<ul style="list-style-type: none"> parameterizable 	No
<ul style="list-style-type: none"> at "0" to "1", min. 	3.2 ms
<ul style="list-style-type: none"> at "0" to "1", max. 	5.3 ms
<ul style="list-style-type: none"> at "1" to "0", min. 	2.9 ms
<ul style="list-style-type: none"> at "1" to "0", max. 	4.5 ms
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
<ul style="list-style-type: none"> permissible quiescent current (2-wire sensor), max. 	1.5 mA
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
<ul style="list-style-type: none"> Diagnostic alarm 	Yes; channel by channel
<ul style="list-style-type: none"> Hardware interrupt 	Yes; channel by channel
Diagnoses	
<ul style="list-style-type: none"> Diagnostic information readable 	Yes
<ul style="list-style-type: none"> Monitoring the supply voltage 	Yes; Module-wise
<ul style="list-style-type: none"> parameterizable 	Yes
<ul style="list-style-type: none"> Wire-break 	Yes; Channel-by-channel, optional protective circuit for preventing wire-break diagnostics in the case of simple encoder contacts: 15 kOhm to 18 kOhm
<ul style="list-style-type: none"> Short-circuit 	No
Diagnostics indication LED	
<ul style="list-style-type: none"> MAINT LED 	Yes; Yellow 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	
<ul style="list-style-type: none"> between the channels 	No
<ul style="list-style-type: none"> between the channels and backplane bus 	Yes
<ul style="list-style-type: none"> between the channels and the power supply of the electronics 	No
Isolation	
Isolation tested with	1 500 V DC/1 min, type test

Ambient conditions

Ambient temperature during operation	
• horizontal installation, min.	-40 °C
• horizontal installation, max.	70 °C
• vertical installation, min.	-40 °C
• vertical installation, max.	60 °C

Dimensions

Width	22.5 mm
Height	115 mm
Depth	138 mm

Weights

Weight, approx.	150 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

Approvals / Certificates

General Product Approval



[Miscellaneous](#)



[China RoHS](#)



General Product Approval **For use in hazardous locations**



[Declaration of Conformity](#)



For use in hazardous locations **Maritime application**



[Miscellaneous](#)



Maritime application **Environment**



[NK / Nippon Kaiji Kyokai](#)



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



Siemens EcoTech



last modified:

10/23/2025