Data sheet

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



General information	
Product type designation	DI 8xNAMUR HF
Firmware version	V1.0
 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 / V13
 STEP 7 configurable/integrated as of version 	V5.5 SP3 / -
 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	No

• 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
Encoder supply	
Number of outputs	8
Short-circuit protection	Yes
24 V encoder supply	
• 24 V	No
Short-circuit protection	No
Power loss	
Power loss, typ.	1.5 W
Address area	
Address space per module	
 Address space per module, max. 	1 byte; + 1 byte for QI information
Digital inputs	
Number of digital inputs	8
Digital inputs, parameterizable	Yes
Туре	NAMUR
Pulse extension	Yes; 0.5 s, 1 s, 2 s
Edge evaluation	Yes; rising edge, falling edge, edge change
Signal change flutter	Yes; 2 to 32 signal changes
Flutter observation window	Yes; 0.5 s, 1 s to 100 s in 1-s steps
Input voltage	
 Type of input voltage 	DC
Rated value (DC)	8.2 V
Input current	
for 10 k switched contact	
— for signal "0"	0.35 to 1.2 mA
— for signal "1"	2.1 to 7 mA
for unswitched contact	
for signal "0", max. (permissible quiescent current)	0.5 mA
— for signal "1"	typ. 8 mA
for NAMUR encoders	
— for signal "0"	0.35 to 1.2 mA
— for signal "1"	2.1 to 7 mA
Input delay (for rated value of input voltage)	

• tolerated changeover time for changeover contacts	300 ms
for standard inputs	
— parameterizable	No
for NAMUR inputs	
— at "0" to "1", max.	12 ms
— at "1" to "0", max.	12 ms
Cable length	
• shielded, max.	200 m
Encoder	
Connectable encoders	
 NAMUR encoder/changeover contact according to EN 60947 	Yes
 Single contact / changeover contact unconnected 	Yes
\bullet Single contact / changeover contact connected with 10 $k\Omega$	Yes
Isochronous mode	
Isochronous operation (application synchronized up	No
to terminal)	
Intervenie dia secondi a la tata di informa ati a s	
interrupts/diagnostics/status information	
Interrupts/diagnostics/status information Alarms	
	Yes; channel by channel
Alarms	Yes; channel by channel Yes; Parameterizable, channels 0 to 7
Alarms • Diagnostic alarm	
Alarms • Diagnostic alarm • Hardware interrupt	
Alarms • Diagnostic alarm • Hardware interrupt Diagnostic messages	Yes; Parameterizable, channels 0 to 7
Alarms • Diagnostic alarm • Hardware interrupt Diagnostic messages • Diagnostic information readable	Yes; Parameterizable, channels 0 to 7 Yes
Alarms Diagnostic alarm Hardware interrupt Diagnostic messages Diagnostic information readable Diagnostics	Yes; Parameterizable, channels 0 to 7 Yes Yes
Alarms Diagnostic alarm Hardware interrupt Diagnostic messages Diagnostic information readable Diagnostics Monitoring the supply voltage	Yes; Parameterizable, channels 0 to 7 Yes Yes Yes Yes
Alarms Diagnostic alarm Hardware interrupt Diagnostic messages Diagnostic information readable Diagnostics Monitoring the supply voltage — Parameterizable	Yes; Parameterizable, channels 0 to 7 Yes Yes Yes Yes Yes
Alarms Diagnostic alarm Hardware interrupt Diagnostic messages Diagnostic information readable Diagnostics Monitoring the supply voltage — Parameterizable Monitoring of encoder power supply	Yes; Parameterizable, channels 0 to 7 Yes Yes Yes Yes Yes Yes Yes Ye
Alarms Diagnostic alarm Hardware interrupt Diagnostic messages Diagnostic information readable Diagnostics Monitoring the supply voltage — Parameterizable Monitoring of encoder power supply Wire-break	Yes; Parameterizable, channels 0 to 7 Yes Yes Yes Yes Yes Yes Yes; channel by channel Yes; channel by channel
Alarms Diagnostic alarm Hardware interrupt Diagnostic messages Diagnostic information readable Diagnostics Monitoring the supply voltage — Parameterizable Monitoring of encoder power supply Wire-break Short-circuit	Yes; Parameterizable, channels 0 to 7 Yes Yes Yes Yes Yes Yes; channel by channel Yes; channel by channel Yes; channel by channel
Alarms Diagnostic alarm Hardware interrupt Diagnostic messages Diagnostic information readable Diagnostics Monitoring the supply voltage — Parameterizable Monitoring of encoder power supply Wire-break Short-circuit Group error	Yes; Parameterizable, channels 0 to 7 Yes Yes Yes Yes Yes Yes; channel by channel Yes; channel by channel Yes; channel by channel
Alarms Diagnostic alarm Hardware interrupt Diagnostic messages Diagnostics information readable Diagnostics Monitoring the supply voltage — Parameterizable Monitoring of encoder power supply Wire-break Short-circuit Group error Diagnostics indication LED	Yes Yes Yes Yes Yes Yes Yes Yes Yes; channel by channel Yes; channel by channel Yes; channel by channel Yes; channel by channel
Alarms Diagnostic alarm Hardware interrupt Diagnostic messages Diagnostics information readable Diagnostics Monitoring the supply voltage — Parameterizable Monitoring of encoder power supply Wire-break Short-circuit Group error Diagnostics indication LED Monitoring of the supply voltage (PWR-LED)	Yes; Parameterizable, channels 0 to 7 Yes Yes Yes Yes Yes; channel by channel Yes; channel by channel Yes; channel by channel Yes; green PWR LED
Alarms Diagnostic alarm Hardware interrupt Diagnostic messages Diagnostics Monitoring the supply voltage — Parameterizable Monitoring of encoder power supply Wire-break Short-circuit Group error Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) Channel status display	Yes; Parameterizable, channels 0 to 7 Yes Yes Yes Yes Yes; channel by channel Yes; channel by channel Yes; channel by channel Yes; channel by channel Yes Yes; green PWR LED Yes; Green LED
Alarms Diagnostic alarm Hardware interrupt Diagnostic messages Diagnostics information readable Diagnostics Monitoring the supply voltage — Parameterizable Monitoring of encoder power supply Wire-break Short-circuit Group error Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) Channel status display for channel diagnostics for module diagnostics	Yes; Parameterizable, channels 0 to 7 Yes Yes Yes Yes Yes; channel by channel Yes Yes; green PWR LED Yes; Green LED Yes; Red LED
Alarms Diagnostic alarm Hardware interrupt Diagnostic messages Diagnostics Diagnostics Monitoring the supply voltage — Parameterizable Monitoring of encoder power supply Wire-break Short-circuit Group error Diagnostics indication LED Monitoring of the supply voltage (PWR-LED) Channel status display for channel diagnostics for module diagnostics	Yes; Parameterizable, channels 0 to 7 Yes Yes Yes Yes Yes; channel by channel Yes Yes; green PWR LED Yes; Green LED Yes; Red LED

Yes • between the channels and backplane bus Yes • between the channels and the power supply of the electronics Permissible potential difference between different circuits 75 V DC/60 V AC (base isolation) Isolation tested with 707 V DC (type test) Width 15 mm Weights Weight, approx. 32 g last modified: 17.09.2015