



SIMATIC, electronic module, for ET200iSP, 8 DI NAMUR, Ex ib (ia Ga) IIC T4 Gb, Ex ib [ia IIC Da] IIC T4 Gb, Ex ib [ia] I Mb

General information	
Product brand name	SIMATIC
Product family	ET 200iSP
Product category	Digital module input
Product type designation	8DI NAMUR
CiR - Configuration in RUN	
Reparameterization possible in RUN	Yes
Installation type/mounting	
Rack mounting	No
Front mounting	Yes
Rail mounting	Yes
Wall mounting/direct mounting	No
Supply voltage	
Type of supply voltage	DC
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Input current	
Current consumption, typ.	80 mA
from load voltage (power bus), max.	90 mA
Power loss	
Power loss, typ.	1.1 W
Hardware configuration	
Fieldbus connection via separate transceiver	Yes
Digital inputs	
Number of digital inputs	8
Digital input functions, parameterizable	
- Counter — Number, max. — Counting frequency, max.	2; normal and periodic count function 5 kHz; with a cable length of 20 m: 5 kHz; with a cable length of 100 m: 1 kHz; with a cable length of 200 m: 500 Hz
Input voltage	
Type of input voltage	DC
Input current	
- for signal "0", max. (permissible quiescent current) - for signal "1", min.	1.2 mA 2.1 mA
Input delay (for rated value of input voltage)	
- Delay time for signal change, min. - Delay time for signal change, max.	2.8 ms 3.5 ms
for standard inputs	
— at "0" to "1", min.	2.8 ms

— at "0" to "1", max.	3.5 ms
— at "1" to "0", min.	2.8 ms
— at "1" to "0", max.	3.5 ms
Cable length	
• shielded, max.	500 m
Encoder	
Number of connectable encoders, max.	8
Connectable encoders	
• NAMUR encoder	Yes
Interfaces	
Number of PROFINET interfaces	0
Number of RS 485 interfaces	0
Protocols	
Supports protocol for PROFINET IO	No
PROFIsafe	No
PROFIBUS	No
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm	Yes; Parameterizable
• Hardware interrupt	No
Diagnoses	
• Diagnostic information readable	Yes
• Wire-break	Yes
• Short-circuit	Yes; R load < 150 ohms with NAMUR sensor/sensor and NAMUR changeover contact/sensor to DIN 19234
Diagnostics indication LED	
• Group error SF (red)	Yes
• Status indicator digital input (green)	Yes
Integrated Functions	
Frequency measurement	Yes; (Gate time) 50 ms; 200 ms; 1 s
• Number of frequency meters	2
Ex(i) characteristics	
maximum values for connecting terminals for gas group IIC	
• U _o (no-load voltage), max.	9.6 V
• I _o (short-circuit current), max.	16 mA
• P _o (power output), max.	38 mW
• C _o (permissible external capacity), max.	3.6 µF
• L _o (permissible external inductivity), max.	110 mH
Potential separation	
Potential separation digital inputs	
• between the channels	No
• between the channels and backplane bus	Yes
Permissible potential difference	
between different circuits	60 V DC/30 V AC
Degree and class of protection	
IP degree of protection	IP30
Standards, approvals, certificates	
CE mark	CE 0344
UKCA mark	DEKRA 21UKEX0084 Importer UK: Siemens plc Manchester M20 2UR
cULus	LISTED E334384
FM approval	CLASSIFIED 3025852
Suitable for safety functions	No
INMETRO certificate	UL-BR 12.0068
reference designation according to IEC 81346-2 (2009)	K
Use in hazardous areas	
• ATEX marking	II 2 G (1) G Ex ib [ia Ga] IIC T4 Gb II 2 G (1) D Ex ib [ia IIIC Da] IIC T4 Gb I M2 Ex ib [ia] I Mb
• ATEX certificate	KEMA 04 ATEX 1248
• IECEx	IECEx KEM 05.0010
• CCC Ex	2020322310002637

• EAC Ex • FM marking	PB Ex ib [ia] I Mb 1Ex ib [ia Ga] IIC T4 Gb [Ex ia Da] IIIC Class I, Zone 1 AEx ib [ia] IIC T4 Ex ib IIC T4 NI, Class I, DIV.2, GP. A,B,C,D T4 AIS, Class I, DIV.1, GP. A,B,C,D T4 DIP Class II, III, GP. E,F,G
• Explosion protection category for gas • Explosion protection category for dust	ATEX gas explosion protection, Zone 1 ATEX dust explosion protection, Zone 21 always install in corresponding enclosure
• associated equipment (Ex ia) • associated equipment (Ex ib)	Yes Yes
Marine approval	
• Germanischer Lloyd (GL) • American Bureau of Shipping (ABS) • Bureau Veritas (BV) • Det Norske Veritas (DNV)	Yes Yes Yes Yes
connection method	
Design of electrical connection	Screw/spring-type terminal
Dimensions	
Width	30 mm
Height	129 mm
Depth	136.5 mm
Weights	
Weight, approx.	255 g
last modified:	1/2/2025 