



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
HW functional status	12
Firmware version	V1.1.1
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	
<ul style="list-style-type: none"> <li>• Counter                             <ul style="list-style-type: none"> <li>— Number, max.</li> <li>— Counting frequency, max.</li> </ul> </li> </ul>	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	
<ul style="list-style-type: none"> <li>• Type of input voltage</li> </ul>	DC
Input current	
<ul style="list-style-type: none"> <li>• for signal "0", max. (permissible quiescent current)</li> <li>• for signal "1", min.</li> </ul>	1.2 mA 2.1 mA
Input delay (for rated value of input voltage)	
<ul style="list-style-type: none"> <li>• Delay time for signal change, min.</li> <li>• Delay time for signal change, max.</li> </ul>	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
<b>Encoder</b>	
Number of connectable encoders, max.	8
Connectable encoders	
• NAMUR encoder	Yes
<b>Interfaces</b>	
Number of PROFINET interfaces	0
Number of RS 485 interfaces	0
<b>Protocols</b>	
Supports protocol for PROFINET IO	No
PROFIsafe	No
PROFIBUS	No
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm	Yes; Parameterizable
• Hardware interrupt	No
Diagnoses	
• Diagnostic information readable	Yes
• Wire-break	Yes; I load < 0.2 mA with NAMUR encoders/encoders and NAMUR changeover contact/encoders to DIN 19234
• 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
<b>Integrated Functions</b>	
Frequency measurement	Yes; (Gate time) 50 ms; 200 ms; 1 s
• Number of frequency meters	2
<b>Ex(i) characteristics</b>	
Module for Ex(i) protection	Yes; for more Co/Lo combinations, see certificate IECEx KEM 05.0010
maximum values for connecting terminals for gas group IIC	
• U <sub>o</sub> (no-load voltage), max.	9.6 V
• I <sub>o</sub> (short-circuit current), max.	16 mA
• P <sub>o</sub> (power output), max.	38 mW
• C <sub>o</sub> (permissible external capacity), max.	3.6 µF
• L <sub>o</sub> (permissible external inductivity), max.	110 mH
<b>Potential separation</b>	
Potential separation digital inputs	
• between the channels	No
• between the channels and backplane bus	Yes
<b>Permissible potential difference</b>	
between different circuits	60 V DC/30 V AC
<b>Degree and class of protection</b>	
IP degree of protection	IP30
<b>Standards, approvals, certificates</b>	
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

- ATEX certificate
- IECEx
- CCC Ex
- EAC Ex
- FM marking
- Explosion protection category for gas
- Explosion protection category for dust
- associated equipment (Ex ia)
- associated equipment (Ex ib)

Ex ib [ia] I Mb  
 KEMA 04 ATEX 1248  
 IECEx KEM 05.0010  
 2020322310002637  
 PB Ex ib [ia] I Mb 1Ex ib [ia Ga] IIC T4 Gb [Ex ia Da] IIC  
 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  
 ATEX gas explosion protection, Zone 1  
 ATEX dust explosion protection, Zone 21 always install in corresponding enclosure  
 Yes  
 Yes

Marine approval	
• Germanischer Lloyd (GL)	Yes
• American Bureau of Shipping (ABS)	Yes
• Bureau Veritas (BV)	Yes
• Det Norske Veritas (DNV)	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

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](#)

[China RoHS](#)

[KC](#)



**For use in hazardous locations**



[FM](#)



[Miscellaneous](#)



**For use in hazardous locations** **Maritime application**

[CCC-Ex](#)



[Miscellaneous](#)



Maritime application

Environment



[NK / Nippon Kaiji Kyokai](#)



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