

SIMATIC ET 200AL, PROFIBUS interface module IM 157-1 DP,
Degree of protection IP67



General information	
Product type designation	IM 157-1 DP
HW functional status	FS02
Firmware version	V1.0.x
Vendor identification (VendorID)	81A9H
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 as of version 	STEP 7 V13 SP1 or higher
<ul style="list-style-type: none"> STEP 7 configurable/integrated as of version 	From V5.5 SP4 Hotfix 3
<ul style="list-style-type: none"> PROFIBUS as of GSD version/GSD revision 	GSD as of Revision 5
Configuration control	
via dataset	Yes
Supply voltage	
Load voltage 1L+	
<ul style="list-style-type: none"> Rated value (DC) 	24 V
<ul style="list-style-type: none"> permissible range, lower limit (DC) 	20.4 V

- permissible range, upper limit (DC) 28.8 V
- Reverse polarity protection Yes; against destruction

Input current

Current consumption (rated value)	50 mA
from load voltage 1L+ (unswitched voltage)	4 A; Maximum value
from load voltage 2L+, max.	4 A; Maximum value

Power loss

Power loss, typ.	1.7 W
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Address area

Address space per station	
• Address space per station, max.	244 byte

Interfaces

Number of PROFIBUS interfaces	1
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1. Interface

Interface type	PROFIBUS DP
Interface types	
• RS 485	Yes
• M12 port	Yes; 2x M12 B-coded
Protocols	
• PROFIBUS DP slave	Yes

Interface types

RS 485	
• Transmission rate, max.	12 Mbit/s

Protocols

PROFIBUS DP	
Services	
— SYNC capability	Yes
— FREEZE capability	Yes
— Direct data exchange (slave-to-slave communication)	Yes
— DPV0	Yes
— DPV1	Yes

Interrupts/diagnostics/status information

Diagnostics function	Yes
Alarms	
• Diagnostic alarm	Yes
Diagnostics indication LED	
• RUN LED	Yes; green LED
• ERROR LED	Yes; red LED

- MAINT LED
- Connection display DP

Yes; Yellow LED

Yes; green LED

Potential separation

between the load voltages

Yes

between PROFIBUS DP and all other circuit components

Yes

Isolation

Isolation tested with

707 V DC (type test)

Degree and class of protection

IP degree of protection

IP65/67

Standards, approvals, certificates

Suitable for safety-related tripping of standard modules

Yes; From FS01

Highest safety class achievable for safety-related tripping of standard modules

- Performance level according to ISO 13849-1
- Category according to ISO 13849-1
- SILCL according to IEC 62061

PL d

Cat. 3

SILCL 2

Ambient conditions

Ambient temperature during operation

- min.
- max.

-30 °C

55 °C

Connection method

Design of electrical connection for supply voltage

M8, 4-pole

ET-Connection

- ET-Connection

M8, 4-pin, shielded

Dimensions

Width

45 mm

Height

159 mm

Depth

46 mm

Weights

Weight, approx.

211 g

last modified:

05/13/2020