

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	E01
Firmware version	V1.0.x
Vendor identification (VendorID)	81A9H
Product function	
• I&M data	Yes; I&M0 to I&M3
Engineering with	
• STEP 7 TIA Portal configurable/integrated as of version	STEP 7 V13 SP1 or higher
• STEP 7 configurable/integrated as of version	From V5.5 SP4 Hotfix 3
• PROFIBUS as of GSD version/GSD revision	GSD as of Revision 5
Configuration control	
via dataset	Yes
Supply voltage	
Load voltage 1L+	
• Rated value (DC)	24 V
• 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
Address area	
Address space per station	
• Address space per station, max.	244 byte
Interfaces	
Number of PROFIBUS interfaces	1
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	
Alarms	Yes
Diagnostics function	Yes
Diagnostics indication LED	
• RUN LED	Yes; Green LED
• ERROR LED	Yes; Red LED
• MAINT LED	Yes; yellow LED

- Connection display DP

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)
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Degree and class of protection

IP degree of protection	IP65/67
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Standards, approvals, certificates

Suitable for safety-related tripping of standard modules	Yes; From FS01
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Highest safety class achievable for safety-related tripping of standard modules

• Performance level according to ISO 13849-1	PL d
• Category according to ISO 13849-1	Cat. 3
• SILCL according to IEC 62061	SILCL 2

Ambient conditions

Ambient temperature during operation

• min.	-25 °C
• max.	55 °C

Connection method

Power supply	M8, 4-pole
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ET-Connection

• ET-Connection	M8, 4-pin, shielded
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Dimensions

Width	45 mm
Height	159 mm
Depth	46 mm

Weights

Weight, approx.	211 g
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last modified: 10/24/2018