



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	
• I&M data	Yes; I&M0 to I&M3
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	STEP 7 V13 SP1 or higher
• STEP 7 configurable/integrated from version	From V5.5 SP4 Hotfix 3
• PROFIBUS from GSD version/GSD revision	GSD as of Revision 5
Configuration control	
via dataset	Yes
Supply voltage	
power supply according to NEC Class 2 required	No
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
<b>Protocols</b>	
PROFIBUS DP	
Services	
— SYNC capability	Yes
— FREEZE capability	Yes
— Direct data exchange (slave-to-slave communication)	Yes
— DPV0	Yes
— DPV1	Yes
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm	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
<b>Potential separation</b>	
between the load voltages	Yes
between PROFIBUS DP and all other circuit components	Yes
<b>Isolation</b>	
Isolation tested with	707 V DC (type test)
<b>Degree and class of protection</b>	
IP degree of protection	IP65/67
<b>Standards, approvals, certificates</b>	
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	PL d
• Category according to ISO 13849-1	Cat. 3
• SIL acc. to IEC 62061	SIL 2
• remark on safety-oriented shutdown	<a href="https://support.industry.siemens.com/cs/de/en/view/39198632">https://support.industry.siemens.com/cs/de/en/view/39198632</a>
<b>Ambient conditions</b>	
Ambient temperature during operation	
• min.	-30 °C
• max.	55 °C
<b>connection method</b>	
Design of electrical connection for supply voltage	M8, 4-pole
ET-Connection	
• ET-Connection	M8, 4-pin, shielded
<b>Dimensions</b>	
Width	45 mm
Height	159 mm
Depth	46 mm
<b>Weights</b>	
Weight, approx.	211 g
<b>last modified:</b>	8/16/2023 