

SIMATIC ET 200AL, PROFIBUS INTERFACEMODULE IM157-1 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	
<ul style="list-style-type: none"> <li>I&amp;M data</li> </ul>	Yes; I&M0 to I&M3
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated as of version</li> </ul>	STEP 7 V13 SP1 or higher
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated as of version</li> </ul>	From V5.5 SP4 Hotfix 3
<ul style="list-style-type: none"> <li>PROFIBUS as of GSD version/GSD revision</li> </ul>	GSD as of Revision 5
Configuration control	
via dataset	Yes
Supply voltage	
Load voltage 1L+	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> </ul>	24 V
<ul style="list-style-type: none"> <li>permissible range, lower limit (DC)</li> </ul>	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
Functionality	
• PROFIBUS DP slave	Yes

#### Interface types

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

### Protocols

#### PROFIBUS

##### 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
Diagnostic functions	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

Degree of protection acc. to EN 60529	
• IP65	Yes
• IP67	Yes

### Ambient conditions

Ambient temperature during operation	
• min.	-25 °C
• max.	55 °C

### Connection method

Power supply	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
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**last modified:** 12/22/2016