SIEMENS

Data sheet

6ES7157-1AB00-0AB0

SIMATIC ET 200AL, PROFINET interface module IM 157-1 PN, Degree of protection IP67



General information	
Product type designation	IM 157-1 PN
HW functional status	E01
Firmware version	V1.0.x
Vendor identification (VendorID)	002AH
Product function	
● I&M data	Yes; I&M0 to I&M4
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
 PROFINET as of GSD version/GSD revision 	GSDML V2.3.1
Configuration control	
Configuration control via dataset	Yes
	Yes
via dataset	Yes
via dataset Supply voltage	Yes 24 V

• permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes; against destruction
Input current Current consumption (rated value)	100 mA
from load voltage 1L+ (unswitched voltage)	4 A; Maximum value
from load voltage 2L+, max.	4 A; Maximum value
nom load voltage zL+, max.	
Power loss	
Power loss, typ.	2.9 W
Address area	
Address space per station	
 Address space per station, max. 	1 430 byte
Interfaces	
Number of PROFINET interfaces	1
1. Interface	
Interface type	PROFINET
Interface types	
integrated switch	Yes
• M12 port	Yes; 2x M12 D-coded
Protocols	
PROFINET IO Device	Yes
Interface types	
Interface types M12 port	
Transmission procedure	PROFINET with 100 Mbit/s full duplex (100BASE-TX)
	Yes; for Ethernet services
• 10 Mbps	Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• 100 Mbps	Yes
Autonegotiation	
Autocrossing	Yes
Protocols	
PROFINET IO Device	
Services	
— Open IE communication	Yes
— IRT	Yes; 250 $\mu s,$ 500 $\mu s,$ 1 ms, 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms
— PROFlenergy	Yes
— Shared device	Yes
— Number of IO Controllers with shared	4
device, max.	
Redundancy mode	
• MRP	Yes
• MRPD	Yes

• TCP/IPYes• SINMPYes• LLDPYesInterrupts/diagnostics/status informationAlarmsYesDiagnostics functionYesDiagnostics function LEDYes• RUN LEDYes; Green LED• RUN LEDYes; Red LED• Connection display LINK TX/RXYes; Yellow LED• Connection display LINK TX/RXYesPotential separationYesbetween the load voltagesYesbetween PROFINET and all other circuitsYesIsolation tested with707 V DC (type test)Degree and class of protectionIP65/67Suitable for safety-related tripping of standard modulesYes; From FS01Highest safety class achievable for safety-related tripping of standard modulesYes / Yes / Yes• Performance level according to ISO 13849-1PL d
• LLDP Yes Interrupts/diagnostics/status information Yes Alarms Yes Diagnostics function Yes Diagnostics indication LED Yes; Green LED • RUN LED Yes; Green LED • ERROR LED Yes; Yellow LED • Connection display LINK TX/RX Yes; Yellow LED • Detential separation Yes between the load voltages Yes between PROFINET and all other circuits Yes Isolation tested with 707 V DC (type test) Degree and class of protection IP65/67 Suitable for safety-related tripping of standard modules Yes; From FS01 Highest safety class achievable for safety-related tripping of standard modules Yes; Totadard modules
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• 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 emin25 °C
• max. 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 40 mm

Weight, approx.

last modified:

263 g

01/22/2020