

SIMATIC ET 200AL, PROFNET INTERFACEMODULE IM157-1 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	
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) • Reverse polarity protection	28.8 V 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
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 • M12 port	Yes Yes; 2x M12 d-coded
Functionality	
• PROFINET IO Device	Yes
Interface types	
M12 port	
• Transmission procedure • 10 Mbps • 100 Mbps • Autonegotiation • Autocrossing	PROFINET with 100 Mbit/s full duplex (100BASE-TX) Yes; for Ethernet services Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX) Yes Yes
Protocols	
PROFINET IO Device	
Services	
— Open IE communication	Yes
— IRT	Yes; 250 µs, 500 µs, 1 ms, 2 ms, 4 ms, 8 ms, 16 ms, 32 ms, 64 ms, 128 ms
— MRP	Yes
— MRPD	Yes
— PROFINergy	Yes
— Shared device	Yes
— Number of IO Controllers with shared device, max.	4
Open IE communication	

• TCP/IP	Yes
• SNMP	Yes
• LLDP	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 LINK TX/RX	Yes; 2x green LED
Potential separation	
between the load voltages	Yes
between PROFINET and all other circuits	Yes
Isolation	
Isolation tested with	707 V DC (type test)
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	40 mm
Weights	
Weight, approx.	263 g
last modified:	10/28/2016