



SIMATIC ET 200MP. PROFINET IO-DEVICE INTERFACEMODULE
IM 155-5 PN ST FOR ET 200MP ELEKTRONIKMODULES; UP TO
12 IO-MODULES WITHOUT ADDITIONAL PS; UP TO 30 IO-
MODULES WITH ADDITIONONAL PS SHARED DEVICE; MRP; IRT
>=0.25MS; ISOCHRONICITY FW-UPDATE; I&M0...3; FSU WITH
500MS

General information	
Product type designation	IM 155-5 PN ST
HW functional status	FS01
Firmware version	V4.1.0
Vendor identification (VendorID)	0x002A
Device identifier (DeviceID)	0X0312
Product function	
• I&M data	Yes; I&M0 to I&M3
Engineering with	
• STEP 7 TIA Portal configurable/integrated as of version	V14 or higher with HSP 0223 / integrated with V15 or higher
• STEP 7 configurable/integrated as of version	GSDML V2.32
• PROFINET as of GSD version/GSD revision	V2.3 / -
Configuration control	
via user data	No
via dataset	Yes
Supply voltage	
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
Short-circuit protection	Yes
Mains buffering	
• Mains/voltage failure stored energy time	10 ms
Input current	
Current consumption (rated value)	0.2 A
Current consumption, max.	1.2 A
Inrush current, max.	9 A
I^2t	0.09 A ² ·s
Power	
Infeed power to the backplane bus	14 W
Power available from the backplane bus	2.3 W
Power loss	
Power loss, typ.	4.5 W
Address area	
Address space per module	
• Address space per module, max.	256 byte; per input / output
Address space per station	
• Address space per station, max.	512 byte; per input / output
Hardware configuration	
Integrated power supply	Yes
System power supply can be plugged in to left of IM	Yes
Number of permissible power segments	3
Rack	
• Modules per rack, max.	30; I/O modules
Interfaces	
Number of PROFINET interfaces	1
1. Interface	
Interface types	
• Number of ports	2
• integrated switch	Yes
• RJ 45 (Ethernet)	Yes
Protocols	
• PROFINET IO Device	Yes
• Media redundancy	Yes; PROFINET MRP
Interface types	
RJ 45 (Ethernet)	

• Transmission procedure	PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• 100 Mbps	Yes
• Autonegotiation	Yes
• Autocrossing	Yes

Protocols

PROFINET IO Device

Services

— Isochronous mode	Yes
— Open IE communication	Yes
— IRT	Yes
— PROFINET energy	No
— Prioritized startup	Yes
— Shared device	Yes
— Number of IO Controllers with shared device, max.	2

Redundancy mode

• MRP	Yes
• MRPD	No
• PROFINET system redundancy (S2)	No
• Redundant PROFINET configuration (R1)	No

Open IE communication

• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes

Isochronous mode

Isochronous operation (application synchronized up to terminal)	Yes
Equidistance	Yes
shortest clock pulse	250 µs
max. cycle	4 ms

Interrupts/diagnostics/status information

Status indicator	Yes
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 LINK TX/RX	Yes; 2x green-yellow LEDs

Potential separation

between backplane bus and electronics	No
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between PROFINET and all other circuits	Yes
between supply and all other circuits	No

Isolation

Isolation tested with	707 V DC (type test)
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Ambient conditions

Ambient temperature during operation

• horizontal installation, min.	0 °C
• horizontal installation, max.	60 °C
• vertical installation, min.	0 °C
• vertical installation, max.	40 °C

Altitude during operation relating to sea level

• Installation altitude above sea level, max.	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
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Connection method

ET-Connection

• via BU/BA Send	No
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Dimensions

Width	35 mm
Height	147 mm
Depth	129 mm

last modified: 08/15/2019