

SIMATIC ET 200MP PROFINET IO device Interface module IM 155-5 PN BA for ET 200MP electronic modules; up to 12 IO modules; Integrated 2-port switch; RJ45 Shared Device with 2 IO controllers, MRP; FW update; I&M0...3



General information	
Product type designation	IM 155-5 PN BA
HW functional status	From FS02
Firmware version	V4.3.0
Vendor identification (VendorID)	0x002A
Device identifier (DeviceID)	0X0312
Product function	
I&M data	Yes; I&M0 to I&M3
Isochronous mode	No
Engineering with	
STEP 7 TIA Portal configurable/integrated from version	V15.1 with HSP 187
STEP 7 configurable/integrated from version	V5.5 SP3 / -
PROFINET from GSD version/GSD revision	V2.3 / -
Configuration control	
via user data	No
via dataset	No
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	5 ms
Input current	
Current consumption (rated value)	1 A
Current consumption, max.	1.7 A
Inrush current, max.	2.8 A
I^2t	0.04 A ² ·s
Power	
Infeed power to the backplane bus	14 W
Power loss	
Power loss, typ.	3 W
Address area	
Address space per module	
• Address space per module, max.	64 byte; per input / output
Address space per station	
• Address space per station, max.	64 byte; per input / output
Hardware configuration	
Integrated power supply	Yes
System power supply can be plugged in to left of IM	No
Number of permissible power segments	1
Rack	
• Modules per rack, max.	12; I/O modules
Submodules	
• Number of submodules per station, max.	108; 9 submodules / I/O modules
Interfaces	
Number of PROFINET interfaces	1; 2 ports (switch) RJ45
1. Interface	
Interface types	
• Number of ports	2
• integrated switch	Yes
• RJ 45 (Ethernet)	Yes
• BusAdapter (PROFINET)	No
Protocols	
• PROFINET IO Device	Yes
• Open IE communication	Yes

• Media redundancy	Yes
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	
— IRT	No
— PROFINergy	No
— Prioritized startup	No
— Shared device	Yes
— Number of IO Controllers with shared device, max.	2
Redundancy mode	
• PROFINET system redundancy (S2)	No
Media redundancy	
— MRP	Yes
— MRPD	No
Open IE communication	
• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes
Isochronous mode	
Equidistance	No
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
between PROFINET and all other circuits	Yes; 1 500 V AC
between supply and all other circuits	No

Permissible potential difference	
between different circuits	Safety extra low voltage SELV
Isolation	
Isolation tested with	707 V DC (type test)
Standards, approvals, certificates	
Network loading class	2
Ambient conditions	
Ambient temperature during operation	
• horizontal installation, min.	-30 °C; From FS03
• horizontal installation, max.	60 °C
• vertical installation, min.	-30 °C; From FS03
• 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
Dimensions	
Width	35 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	236 g
last modified:	07/01/2020