



SIMATIC ET 200MP. PROFINET IO device Interface module IM 155-5 PN HF, for ET 200MP electronic modules; Up to 12 IO modules without PS; Up to 30 IO modules with additional PS; Integrated 2-port switch; RJ45 shared device; MRP; IRT  $\geq 0.25$  ms; Isochronous mode FW update; I&M0...3; Prioritized startup, S2 redundancy; Shared device with 4 controllers Suitable for operation with active backplane bus (FW V4.4 or higher)

General information	
Product type designation	IM 155-5 PN HF
HW functional status	From FS03
Firmware version	V4.4
• FW update possible	Yes
Vendor identification (VendorID)	002AH
Device identifier (DeviceID)	0X0312
Product function	
• I&M data	Yes; I&M0 to I&M3
• Module swapping during operation (hot swapping)	Yes; In combination with active backplane bus
• Isochronous mode	Yes
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	V16 with HSP 308
• 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	Yes
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 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)	0.2 A
Current consumption, max.	1.2 A
Inrush current, max.	9 A
$I^2t$	0.09 A <sup>2</sup> ·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
<b>Hardware configuration</b>	
Integrated power supply	Yes
System power supply can be plugged in to left of IM	Yes; only with design with U-connectors
Number of permissible power segments	3
<b>Rack</b>	
• Modules per rack, max.	30; I/O modules
<b>Submodules</b>	
• Number of submodules per station, max.	256
<b>Interfaces</b>	
Number of PROFINET interfaces	1
<b>1. Interface</b>	
<b>Interface types</b>	
• RJ 45 (Ethernet)	Yes
• Number of ports	2
• integrated switch	Yes
<b>Protocols</b>	
• PROFINET IO Device	Yes
• Open IE communication	Yes
• Media redundancy	Yes
<b>PROFINET IO Device</b>	
<b>Services</b>	
— IRT	Yes
— PROFINergy	No
— Prioritized startup	Yes
— Shared device	Yes
— Number of IO Controllers with shared device, max.	4
<b>Interface types</b>	
<b>RJ 45 (Ethernet)</b>	
• Transmission procedure	PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• 100 Mbps	Yes
• Autonegotiation	Yes
• Autocrossing	Yes
<b>Protocols</b>	
<b>Redundancy mode</b>	
• PROFINET system redundancy (S2)	Yes
— on S7-1500R/H	Yes
— on S7-400H	Yes; With GSDML file as of STEP 7 V5.5 SP3
• PROFINET system redundancy (R1)	No
• H-Sync forwarding	Yes
<b>Media redundancy</b>	
— MRP	Yes
— MRPD	Yes
<b>Open IE communication</b>	
• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes
<b>Isochronous mode</b>	
Equidistance	Yes
shortest clock pulse	250 µs
max. cycle	4 ms
<b>Interrupts/diagnostics/status information</b>	
Status indicator	Yes
Alarms	Yes
Diagnostics function	Yes
<b>Diagnostics indication LED</b>	
• 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

<b>Potential separation</b>	
between backplane bus and electronics	No
between PROFINET and all other circuits	Yes; 1 500 V AC
between supply and all other circuits	No
<b>Isolation</b>	
Isolation tested with	707 V DC (type test)
<b>Ambient conditions</b>	
Ambient temperature during operation	
• horizontal installation, min.	-25 °C; from FS04
• horizontal installation, max.	60 °C
• vertical installation, min.	-25 °C; from FS04
• 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
<b>connection method</b>	
ET-Connection	
• via BU/BA Send	No
<b>Dimensions</b>	
Width	35 mm
Height	147 mm
Depth	129 mm
<b>Weights</b>	
Weight, approx.	350 g

**last modified:** 3/31/2023 