



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 ≥ 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
<ul style="list-style-type: none"> FW update possible 	Yes
Vendor identification (VendorID)	002AH
Device identifier (DeviceID)	0X0312
Product function	
<ul style="list-style-type: none"> I&M data 	Yes; I&M0 to I&M3
<ul style="list-style-type: none"> Module swapping during operation (hot swapping) 	Yes; In combination with active backplane bus
<ul style="list-style-type: none"> Isochronous mode 	Yes
Engineering with	
<ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated from version 	V16 with HSP 308
<ul style="list-style-type: none"> STEP 7 configurable/integrated from version 	V5.5 SP3 / -
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> 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 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	
<ul style="list-style-type: none"> Address space per module, max. 	256 byte; per input / output

Address space per station	
<ul style="list-style-type: none"> 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; only with design with U-connectors
Number of permissible power segments	3
Rack	
<ul style="list-style-type: none"> Modules per rack, max. 	30; I/O modules
Submodules	
<ul style="list-style-type: none"> Number of submodules per station, max. 	256
Interfaces	
Number of PROFINET interfaces	1
1. Interface	
Interface types	
<ul style="list-style-type: none"> RJ 45 (Ethernet) 	Yes
<ul style="list-style-type: none"> Number of ports 	2
<ul style="list-style-type: none"> integrated switch 	Yes
Protocols	
<ul style="list-style-type: none"> PROFINET IO Device 	Yes
<ul style="list-style-type: none"> Open IE communication 	Yes
<ul style="list-style-type: none"> Media redundancy 	Yes
PROFINET IO Device	
Services	
<ul style="list-style-type: none"> IRT 	Yes
<ul style="list-style-type: none"> PROFenergy 	No
<ul style="list-style-type: none"> Prioritized startup 	Yes
<ul style="list-style-type: none"> Shared device 	Yes
<ul style="list-style-type: none"> Number of IO Controllers with shared device, max. 	4
Interface types	
RJ 45 (Ethernet)	
<ul style="list-style-type: none"> Transmission procedure 	PROFINET with 100 Mbit/s full duplex (100BASE-TX)
<ul style="list-style-type: none"> 100 Mbps 	Yes
<ul style="list-style-type: none"> Autonegotiation 	Yes
<ul style="list-style-type: none"> Autocrossing 	Yes
Protocols	
Redundancy mode	
<ul style="list-style-type: none"> PROFINET system redundancy (S2) <ul style="list-style-type: none"> on S7-1500R/H on S7-400H 	Yes Yes Yes; With GSDML file as of STEP 7 V5.5 SP3
<ul style="list-style-type: none"> PROFINET system redundancy (R1) 	No
<ul style="list-style-type: none"> H-Sync forwarding 	Yes
Media redundancy	
<ul style="list-style-type: none"> MRP 	Yes
<ul style="list-style-type: none"> MRPD 	Yes
Open IE communication	
<ul style="list-style-type: none"> TCP/IP 	Yes
<ul style="list-style-type: none"> SNMP 	Yes
<ul style="list-style-type: none"> LLDP 	Yes
Isochronous mode	
Equidistance	Yes
shortest clock pulse	250 μ s
max. cycle	4 ms
Interrupts/diagnostics/status information	
Status indicator	Yes
Alarms	Yes
Diagnostics function	Yes
Diagnostics indication LED	
<ul style="list-style-type: none"> RUN LED 	Yes; green LED
<ul style="list-style-type: none"> ERROR LED 	Yes; red LED
<ul style="list-style-type: none"> MAINT LED 	Yes; Yellow LED
<ul style="list-style-type: none"> 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
Isolation	
Isolation tested with	707 V DC (type test)
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max. 	<ul style="list-style-type: none"> -25 °C; from FS04 60 °C -25 °C; from FS04 40 °C
Altitude during operation relating to sea level	
<ul style="list-style-type: none"> • Installation altitude above sea level, max. 	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
connection method / header	
ET-Connection	
<ul style="list-style-type: none"> • via BU/BA Send 	No
Dimensions	
Width	35 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	350 g
last modified:	3/31/2023 