

Siemens
EcoTech



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
<ul style="list-style-type: none"> FW update possible 	Yes
Vendor identification (VendorID)	0x002A
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) 	No
<ul style="list-style-type: none"> Isochronous mode 	No
<ul style="list-style-type: none"> Tool changer 	No
<ul style="list-style-type: none"> Local coupling, IO data 	No
Engineering with	
<ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated from version 	V15.1
<ul style="list-style-type: none"> STEP 7 configurable/integrated from version 	use GSD file
<ul style="list-style-type: none"> PROFINET from GSD version/GSD revision 	GSDML V2.3
Configuration control	
via dataset	No
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)	1 A; at 24 V DC and without load
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; For input and output data respectively
Address space per station	
• Address space per station, max.	64 byte; For input and output data respectively
Hardware configuration	
Integrated power supply	Yes; 14 W
System power supply can be plugged in to left of IM	No
Number of permissible power segments	1; incl. interface module
Rack	
• Modules per rack, max.	12; I/O modules
Submodules	
• Number of submodules per station, max.	108; 9 per I/O module
Interfaces	
Number of PROFINET interfaces	1; 2 ports (switch)
1. Interface	
Interface types	
• RJ 45 (Ethernet)	Yes
• Number of ports	2
• integrated switch	Yes
• BusAdapter (PROFINET)	No
Protocols	
• PROFINET IO Device	Yes
• Open IE communication	Yes
• Media redundancy	Yes; PROFINET MRP client
PROFINET IO Device	
Services	
— IRT	No
— PROFINergy	No
— Prioritized startup	No
— Shared device	Yes
— Number of IO Controllers with shared device, max.	2
Interface types	
RJ 45 (Ethernet)	
• Transmission procedure	PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• 100 Mbps	Yes
• Autonegotiation	Yes
• Autocrossing	Yes
Protocols	
Supports protocol for PROFINET IO	Yes
PROFIsafe	Yes; FW V4.3.0 or higher
PROFIBUS	No
EtherNet/IP	No
Modbus TCP	No
Redundancy mode	
• PROFINET system redundancy (S2)	No
— on S7-1500R/H	No
— on S7-400H	No
• PROFINET system redundancy (R1)	No
• H-Sync forwarding	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; 1500 V AC (type test)	
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	
Ecological footprint		
• environmental product declaration	Yes	
Global warming potential		
— global warming potential, (total) [CO2 eq]	64.1 kg	
— global warming potential, (during production) [CO2 eq]	11.1 kg	
— global warming potential, (during operation) [CO2 eq]	53.6 kg	
— global warming potential, (after end of life cycle) [CO2 eq]	-0.669 kg	
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	
Classifications		
	Version	Classification
eClass	14	27-24-26-08
eClass	12	27-24-26-08
eClass	9.1	27-24-26-08
eClass	9	27-24-26-08
eClass	8	27-24-26-08
eClass	7.1	27-24-26-08
eClass	6	27-24-26-08
ETIM	9	EC001604
ETIM	8	EC001604
ETIM	7	EC001604
IDEA	4	3564
UNSPSC	15	32-15-17-05
Approvals / Certificates		
General Product Approval	other	



[Confirmation](#)

last modified:

10/9/2024 