



SIMATIC ET 200SP, PROFINET, 2-port interface module IM 155-6PN/2 High Feature, 1 slot for BusAdapter, max. 64 I/O modules and 16 ET 200AL modules, S2 redundancy, multi-hotswap, 0.25 ms, isochronous mode, optional PN strain relief, including server module

General information	
Product type designation	IM 155-6 PN/2 HF
HW functional status	From FS02
Firmware version	V4.2
• FW update possible	Yes
Product function	
• I&M data	Yes; I&M0 to I&M3
• Module swapping during operation (hot swapping)	Yes; Multi-hot swapping
• Isochronous mode	Yes
• Tool changer	Yes; Docking station and docking unit
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	V15.1
• STEP 7 configurable/integrated from version	use GSD file
• PROFINET from GSD version/GSD revision	GSDML V2.34
Configuration control	
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	10 ms
Input current	
Current consumption, max.	700 mA
Inrush current, max.	4.5 A
I ² t	0.25 A ² ·s
Power loss	
Power loss, typ.	2.4 W
Address area	
Address space per module	
• Address space per module, max.	288 byte; For input and output data respectively
Address space per station	
• Address space per station, max.	1 440 byte
Hardware configuration	
Rack	
• Quantity of operable ET 200SP modules, max.	64
• Quantity of operable ET 200AL modules, max.	16

Submodules	
• Number of submodules per station, max.	256
Interfaces	
Number of PROFINET interfaces	1; 2 ports (switch)
1. Interface	
Interface types	
• RJ 45 (Ethernet)	Yes; with BusAdapter
• Number of ports	2; with BusAdapter
• integrated switch	Yes
• BusAdapter (PROFINET)	Yes; BA 2x RJ45, BA 2x FC, BA 2x SCRJ, BA SCRJ/RJ45, BA SCRJ/FC, BA 2x LC, BA LC/RJ45, BA LC/FC
Protocols	
• PROFINET IO Device	Yes
• Open IE communication	Yes
• Media redundancy	Yes; PROFINET MRP client
PROFINET IO Device	
Services	
— IRT	Yes; 250 µs to 4 ms in 125 µs frame
— PROFIenergy	Yes
— Prioritized startup	Yes
— Shared device	Yes
— Number of IO Controllers with shared device, max.	4
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
PROFIBUS	No
EtherNet/IP	No
Modbus TCP	No
Number of connections	
• Number of MtM communication relationships/connections, max.	16
Redundancy mode	
• PROFINET system redundancy (S2)	Yes; NAP S2
• H-Sync forwarding	Yes
Media redundancy	
— MRP	Yes
— MRPD	No
Open IE communication	
• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes
Isochronous mode	
Equidistance	Yes
shortest clock pulse	250 µs
max. cycle	4 ms
Bus cycle time (TDP), min.	250 µs
Jitter, max.	1 µs
Interrupts/diagnostics/status information	
Status indicator	Yes
Alarms	Yes
Diagnostics function	Yes
Diagnostics indication LED	
• RUN LED	Yes; green LED

• ERROR LED • MAINT LED • Monitoring of the supply voltage (PWR-LED) • Connection display LINK TX/RX	Yes; red LED Yes; Yellow LED Yes; green PWR LED Yes; 2x green link LEDs on BusAdapter																																							
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	3																																							
Ecological footprint																																								
• environmental product declaration	Yes																																							
Global warming potential																																								
— global warming potential, (total) [CO2 eq]	105 kg																																							
— global warming potential, (during production) [CO2 eq]	13.7 kg																																							
— global warming potential, (during operation) [CO2 eq]	91.9 kg																																							
— global warming potential, (after end of life cycle) [CO2 eq]	-0.617 kg																																							
Ambient conditions																																								
Ambient temperature during operation																																								
• horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max.	-30 °C; No condensation 60 °C -30 °C; No condensation 50 °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																																							
Connection method																																								
ET-Connection																																								
• via BU/BA Send	Yes; + 16 ET 200AL modules																																							
Mechanics/material																																								
Strain relief	Yes; Optional																																							
Dimensions																																								
Width	50 mm																																							
Height	117 mm																																							
Depth	74 mm																																							
Weights																																								
Weight, approx.	120 g; without BusAdapter																																							
Classifications																																								
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Approvals / Certificates

General Product Approval

[Miscellaneous](#)[Manufacturer Declaration](#)[China RoHS](#)[PROFINET](#)

General Product Approval

For use in hazardous locations

[EM](#)[CCC-Ex](#)

For use in hazardous locations

Maritime application

[Miscellaneous](#)[Type Examination Certificate](#)

Maritime application

[NK / Nippon Kaiji Kyokai](#)[CCS \(China Classification Society\)](#)

Maritime application

Environment

Industrial Communication

[PROFINET](#)

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