



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^2t	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) • Number of ports • integrated switch • BusAdapter (PROFINET)	Yes; with BusAdapter 2; with BusAdapter Yes 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 • Open IE communication • Media redundancy	Yes Yes Yes; PROFINET MRP client
PROFINET IO Device	
Services	
— IRT — PROFIenergy — Prioritized startup — Shared device — Number of IO Controllers with shared device, max.	Yes; 250 µs to 4 ms in 125 µs frame Yes Yes Yes 4
Interface types	
RJ 45 (Ethernet)	
• Transmission procedure • 100 Mbps • Autonegotiation • Autocrossing	PROFINET with 100 Mbit/s full duplex (100BASE-TX) Yes Yes 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) • H-Sync forwarding	Yes; NAP S2 Yes
Media redundancy	
— MRP — MRPD	Yes No
Open IE communication	
• TCP/IP • SNMP • LLDP	Yes Yes 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 • ERROR LED • MAINT LED • Monitoring of the supply voltage (PWR-LED)	Yes; green LED Yes; red LED Yes; Yellow LED Yes; green PWR LED

● Connection display LINK TX/RX		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.		-30 °C; No condensation	
● horizontal installation, max.		60 °C	
● vertical installation, min.		-30 °C; No condensation	
● vertical installation, max.		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			
		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			

[Miscellaneous](#)



[Manufacturer Declaration](#)

[PROFINET](#)



General Product Approval	For use in hazardous locations
--------------------------	--------------------------------

[KC](#)



[FM](#)

[CCC-Ex](#)



For use in hazardous locations	Maritime application
--------------------------------	----------------------



[Miscellaneous](#)



Maritime application	Environment
----------------------	-------------

[NK / Nippon Kaiji Kyokai](#)



[CCS \(China Classification Society\)](#)



Industrial Communication

[PROFINET](#)

last modified: 10/9/2024