

*** Spare part *** SIMATIC ET 200SP, PROFINET interface module
IM 155-6PN High Feature max. 64 I/O modules, 0.25 ms isochronous
mode Multi-hotswap, incl. server module



General information	
Product type designation	IM 155-6 PN HF
Firmware version	V3.3
Product function	
I&M data	Yes; I&M0 to I&M4
Module swapping during operation (hot swapping)	Yes; Multi-hot swapping
Isochronous mode	Yes
Engineering with	
STEP 7 TIA Portal configurable/integrated from version	V13 SP1 Update 6
STEP 7 configurable/integrated from version	V5.5 SP4 and higher
PROFINET from GSD version/GSD revision	- / V2.3
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
Mains buffering	
• Mains/voltage failure stored energy time	5 ms
Input current	
Current consumption, max.	700 mA
Inrush current, max.	4.5 A
I^2t	0.09 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; Dependent on configuration
Hardware configuration	
Rack	
• Modules per rack, max.	64; + 16 ET 200AL modules
Submodules	
• Number of submodules per station, max.	256
Interfaces	
Number of PROFINET interfaces	1; 2 ports (switch)
1. Interface	
Interface types	
• Number of ports	2
• integrated switch	Yes
• BusAdapter (PROFINET)	Yes; Compatible BusAdapter: BA 2x RJ45, BA 2x FC, BA 2x SCRJ (from FS03, V2.2), BA SCRJ / RJ45 (from FS03, V3.1), BA SCRJ / FC (from FS03, V3.1), BA 2x LC (from FS03, V3.3), BA LC / RJ45 (from FS03, V3.3), BA LC / FC (from FS03, V3.3)
Protocols	
• PROFINET IO Device	Yes
• Open IE communication	Yes
• Media redundancy	Yes; PROFINET MRP
Interface types	
RJ 45 (Ethernet)	
• Transmission procedure	PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• 10 Mbps	No
• 100 Mbps	Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• Autonegotiation	Yes

- Autocrossing

Yes

Protocols

PROFINET IO Device

Services

— IRT	Yes; 250 µs, 500 µs, 1 ms, 2 ms, 4 ms additionally with IRT with high performance: 250 µs to 4 ms in 125 µs frame
— PROFINergy	Yes
— Prioritized startup	Yes
— Shared device	Yes
— Number of IO Controllers with shared device, max.	4

Redundancy mode

- PROFINET system redundancy (S2) Yes; NAP S2

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 Yes; red LED
- MAINT LED Yes; Yellow LED
- Monitoring of the supply voltage (PWR-LED) Yes; green PWR LED

Potential separation

between backplane bus and electronics	No
between PROFINET and all other circuits	Yes
between supply and all other circuits	Yes

Isolation

Isolation tested with	707 V DC between supply voltage and electronics (type test); 1 500 V AC between Ethernet and electronics (type test)
Standards, approvals, certificates	
Network loading class	3
Security level	According to Security Level 1 Test Cases V1.1.1
Ambient conditions	
Ambient temperature during operation	
• horizontal installation, min.	0 °C
• horizontal installation, max.	60 °C
• vertical installation, min.	0 °C
• vertical installation, max.	50 °C
Connection method	
ET-Connection	
• via BU/BA Send	Yes; + 16 ET 200AL modules
Dimensions	
Width	50 mm
Height	117 mm
Depth	74 mm
Weights	
Weight, approx.	147 g; without BusAdapter
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