SIEMENS

SIMATIC ET 200SP, PROFINET interface module IM 155-6PN Standard, max. 32 I/O modules, and 16 ET 200AL modules, single hot swap, incl. server module (6ES7193-6PA00-0AA0)

General information	
Product type designation	IM 155-6 PN ST
HW functional status	FS02
Firmware version	V4.1
Product function	
● I&M data	Yes; I&M0 to I&M3
● Module swapping during operation (hot swapping)	Yes; Single hot swapping
Engineering with	
● STEP 7 TIA Portal configurable/integrated as of version	V14
● STEP 7 configurable/integrated as of version	V5.5 SP4 and higher
● PROFINET as of 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
Short-circuit protection	Yes
Mains buffering	
• Mains/voltage failure stored energy time	10 ms

Input current	
Current consumption (rated value)	450 mA
Current consumption, max.	550 mA
Inrush current, max.	3.7 A
I²t	0.09 A²·s

Power	
Infeed power to the backplane bus	4.5 W

Power loss	
Power loss, typ.	1.9 W

Address area	
Address space per module	
• Address space per module, max.	256 byte; per input / output
Address space per station	
• Address space per station, max.	512 byte; Dependent on configuration

Hardware configuration	
Rack	
• Modules per rack, max.	32; + 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; Applicable BusAdapter: BA 2x RJ45, BA 2x FC
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	Yes; for Ethernet services

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• 100 Mbps	Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• Autonegotiation	Yes
• Autocrossing	Yes

Protocols

PROFINET IO Device

Services

— Isochronous mode	No
— Open IE communication	Yes
— IRT	Yes; with send cycles of between 250 µs and 4 ms in increments of 125 µs
— PROFIenergy	Yes
— Prioritized startup	Yes
— Shared device	Yes
— Number of IO Controllers with shared device, max.	2

Redundancy mode

• MRP	Yes
• MRPD	No
• PROFINET system redundancy (S2)	No

Open IE communication

• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes

Isochronous mode

Isochronous operation (application synchronized up to terminal)	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
• Monitoring of the supply voltage (PWR-LED)	Yes; Green PWR LED
• Connection to network LINK (green)	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
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
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

| **last modified:** | 09/12/2019 |