



SIMATIC ET 200SP, PROFINET interface module IM 155-6 PN ST, max. 32 I/O modules, and 16 ET 200AL modules, multi hot swap, optional PN strain relief, PN security class 1 incl. server module (6ES7193-6PA00-0AA0)

General information	
Product type designation	IM 155-5 PN ST
Firmware version	V6.3
• FW update possible	Yes
Vendor identification (VendorID)	002AH
Device identifier (DeviceID)	0313H
Manufacturer ID according to ODVA (VendorID)	04E3H
Device ID according to ODVA (Product code)	0FA2H
Product function	
• I&M data	Yes; I&M0 to I&M4
• Module swapping during operation (hot swapping)	Yes; Multi-hot swapping
• Isochronous mode	No
• Local coupling, IO data	
— Number of coupling modules	6; 1x output + max. 5x input
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	V20
• STEP 7 configurable/integrated from version	V5.7 SP3
• PROFINET from GSD version/GSD revision	GSDML V2.45
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)	350 mA
Current consumption, max.	450 mA
Inrush current, max.	1 A
I ² t	0.05 A ² ·s
Power loss	
Power loss, typ.	1.8 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.	32
• 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 M12
Protocols	
• PROFINET IO Device	Yes
• Open IE communication	Yes
• Media redundancy	Yes; PROFINET MRP client
PROFINET IO Device	
Services	
— IRT	Yes; 1 ms to 4 ms at an interval of 125 µs
— Dynamic Frame Packing (DFP)	Yes
— Fast Forwarding	Yes
— Fragmentation	Yes
— 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
Redundancy mode	
• PROFINET system redundancy (S2)	No
Media redundancy	
— MRP	Yes
— MRPD	Yes
Open IE communication	
• TCP/IP	Yes
• UDP	Yes
• SNMP	Yes
• LLDP	Yes
• ARP	Yes
• IGMP	Yes
• Multicast	Yes
• Broadcast	Yes
• IPv4	Yes
• IPv6	No
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) • Connection display LINK TX/RX	Yes; green LED 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		
product functions / security / header			
PROFINET Security Class	1		
signed firmware update	Yes		
Secure Boot	No		
safely removing data	Yes		
data integrity	Yes		
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 ET 200SP system 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
Approvals / Certificates			
General Product Approval			



[Manufacturer Declaration](#)



[KC](#)



General Product Approval

For use in hazardous locations

[KC](#)



[CCC-Ex](#)

[FM](#)



[Miscellaneous](#)

For use in hazardous locations

Marine / Shipping



[NK / Nippon Kaiji Kyokai](#)

Marine / Shipping

other

Industrial Communication



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



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