



Figure similar

SIMATIC ET 200SP, PROFINET, 2-port interface module IM 155-6 PN R1, 1 slot for BusAdapter, max. 64 I/O modules R1 redundancy, multi hot swap, 0.25 ms, PN security class 1

General information	
Product type designation	IM 155-6 PN R1
HW functional status	From FS03
Firmware version	V6.1
• FW update possible	Yes
Product function	
• I&M data	Yes; I&M0 to I&M4
• Module swapping during operation (hot swapping)	Yes; Multi-hot swapping
• Isochronous mode	No
• IRT	No
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	V19
• STEP 7 configurable/integrated from version	use GSD file
• PROFINET from GSD version/GSD revision	GSDML V2.45
Configuration control	
via dataset	No
CiR - Configuration in RUN	
Reparameterization possible in RUN	Yes
reconfiguration possible in RUN	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.	5 A
I ² t	0.36 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.	0
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 M12, BA 2x FC, BA 2x SCRJ, BA SCRJ/RJ45, BA SCRJ/FC, BA 2x LC, BA LC/RJ45, BA LC/FC, BA 2x LC-LD, BA LC-LD/RJ45, BA LC-LD/M12
Protocols	
• PROFINET IO Device	Yes
• Open IE communication	Yes
• Media redundancy	Yes; PROFINET MRP client
PROFINET IO Device	
Services	
— IRT	No
— PROFIenergy	No
— Prioritized startup	No
— Shared device	No
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
• PROFINET system redundancy (R1)	Yes
• H-Sync forwarding	Yes
Media redundancy	
— MRP	Yes
— MRPD	No
Open IE communication	
• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes
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
• ACT LED	Yes; green LED
• Monitoring of the supply voltage (PWR-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		Yes	
Permissible potential difference			
between different circuits		Safety extra low voltage SELV	
Isolation			
Isolation tested with		707 V DC (type test)	
Standards, approvals, certificates			
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	
Security			
PROFINET Security Class		1	
signed firmware update		Yes	
Secure Boot		No	
safely removing data		No	
data integrity		Yes	
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.		2 000 m	
Connection method			
ET-Connection			
● via BU/BA Send		No	
Dimensions			
Width		50 mm	
Height		138 mm	
Depth		89 mm	
Weights			
Weight, approx.		192 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	10	EC001604
	ETIM	9	EC001604
	ETIM	8	EC001604
	ETIM	7	EC001604
	IDEA	4	3564

Approvals / Certificates

General Product Approval

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

General Product Approval

For use in hazardous locations

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

For use in hazardous locations

Maritime application

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

Maritime application

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

Environment



last modified:

10/23/2025