



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, 1 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	
Transmission procedure	100BASE-TX
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
— Dynamic Frame Packing (DFP)	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 • Monitoring of the supply voltage (PWR-LED) • Connection display LINK TX/RX	Yes; green 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	Yes																														
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																														
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																															
	<table><tr><td></td><td>Version</td><td>Classification</td></tr><tr><td>eClass</td><td>16</td><td>27-24-26-08</td></tr><tr><td>eClass</td><td>14</td><td>27-24-26-08</td></tr><tr><td>eClass</td><td>12</td><td>27-24-26-08</td></tr><tr><td>eClass</td><td>9.1</td><td>27-24-26-08</td></tr><tr><td>eClass</td><td>9</td><td>27-24-26-08</td></tr><tr><td>eClass</td><td>8</td><td>27-24-26-08</td></tr><tr><td>eClass</td><td>7.1</td><td>27-24-26-08</td></tr><tr><td>eClass</td><td>6</td><td>27-24-26-08</td></tr><tr><td>ETIM</td><td>10</td><td>EC001604</td></tr></table>		Version	Classification	eClass	16	27-24-26-08	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
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ETIM	8	EC001604
ETIM	7	EC001604
IDEA	4	3564
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval



[Miscellaneous](#)

[Manufacturer Declaration](#)



General Product Approval



[China RoHS](#)

For use in hazardous locations



[CCC-Ex](#)

[FM](#)



[Type Examination Certificate](#)



For use in hazardous locations

Maritime application

[Miscellaneous](#)

[CCC-Ex](#)



Maritime application

Environment

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



last modified:

5/20/2026