



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,

Figure similar

General information	
Product type designation	IM 155-6 PN R1
HW functional status	From FS03
Firmware version	V6.1
<ul style="list-style-type: none"> FW update possible 	Yes
Product function	
<ul style="list-style-type: none"> I&M data 	Yes; I&M0 to I&M4
<ul style="list-style-type: none"> Module swapping during operation (hot swapping) 	Yes; Multi-hot swapping
<ul style="list-style-type: none"> Isochronous mode 	No
Engineering with	
<ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated from version 	V19
<ul style="list-style-type: none"> STEP 7 configurable/integrated from version 	use GSD file
<ul style="list-style-type: none"> PROFINET from GSD version/GSD revision 	GSDML V2.45
Configuration control	
via dataset	No
CiR - Configuration in RUN	
Reparameterization 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	
<ul style="list-style-type: none"> Mains/voltage failure stored energy time 	10 ms
Input current	
Current consumption, max.	700 mA
Inrush current, max.	5 A
I^2t	0.36 A ² ·s
Power loss	
Power loss, typ.	2.4 W
Address area	
Address space per module	
<ul style="list-style-type: none"> Address space per module, max. 	288 byte; For input and output data respectively
Address space per station	
<ul style="list-style-type: none"> Address space per station, max. 	1 440 byte
Hardware configuration	
Rack	
<ul style="list-style-type: none"> 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	
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
product functions / security / header	
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

last modified: 1/9/2025 