



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, optional PN strain relief,

General information	
Product type designation	IM 155-6 PN R1
Firmware version	V6.0
<ul style="list-style-type: none"> <li>FW update possible</li> </ul>	Yes
Product function	
<ul style="list-style-type: none"> <li>I&amp;M data</li> </ul>	Yes; I&M0 to I&M3
<ul style="list-style-type: none"> <li>Module swapping during operation (hot swapping)</li> </ul>	Yes; Multi-hot swapping
<ul style="list-style-type: none"> <li>Isochronous mode</li> </ul>	No
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul>	V18
<ul style="list-style-type: none"> <li>PROFINET from GSD version/GSD revision</li> </ul>	GSDML V2.4.x
<ul style="list-style-type: none"> <li>Multi Fieldbus Configuration Tool (MFCT)</li> </ul>	V1.4.1 or higher
Configuration control	
via dataset	No
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"> <li>Mains/voltage failure stored energy time</li> </ul>	10 ms
Input current	
Current consumption, max.	700 mA
Inrush current, max.	5 A
I <sup>2</sup> t	0.36 A <sup>2</sup> ·s
Power loss	
Power loss, typ.	2.4 W
Address area	
Address space per module	
<ul style="list-style-type: none"> <li>Address space per module, max.</li> </ul>	288 byte
Address space per station	
<ul style="list-style-type: none"> <li>Address space per station, max.</li> </ul>	1 440 byte
Hardware configuration	
Integrated power supply	Yes; 24 V DC
Rack	
<ul style="list-style-type: none"> <li>Modules per rack, max.</li> </ul>	64
Submodules	
<ul style="list-style-type: none"> <li>Number of submodules per station, max.</li> </ul>	256

Interfaces	
Number of PROFINET interfaces	1; 2 ports (switch)
1. Interface	
Interface types	
<ul style="list-style-type: none"> <li>Number of ports</li> <li>integrated switch</li> <li>BusAdapter (PROFINET)</li> </ul>	2; via BusAdapter Yes Yes; compatible BusAdapters: 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	
<ul style="list-style-type: none"> <li>PROFINET IO Device</li> <li>Open IE communication</li> <li>Media redundancy</li> </ul>	Yes Yes Yes; as MRP client
Interface types	
RJ 45 (Ethernet)	
<ul style="list-style-type: none"> <li>Transmission procedure</li> <li>100 Mbps</li> <li>Autonegotiation</li> <li>Autocrossing</li> </ul>	PROFINET with 100 Mbit/s full duplex (100BASE-TX) Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX) Yes Yes
Protocols	
PROFINET IO Device	
Services	
<ul style="list-style-type: none"> <li>IRT</li> <li>PROFIenergy</li> <li>Prioritized startup</li> <li>Shared device</li> </ul>	No No No No
Redundancy mode	
<ul style="list-style-type: none"> <li>PROFINET system redundancy (S2)               <ul style="list-style-type: none"> <li>on S7-1500R/H</li> <li>on S7-400H</li> </ul> </li> <li>PROFINET system redundancy (R1)</li> </ul>	No No No Yes
Media redundancy	
<ul style="list-style-type: none"> <li>MRP</li> <li>MRPD</li> </ul>	Yes No
Open IE communication	
<ul style="list-style-type: none"> <li>TCP/IP</li> <li>SNMP</li> <li>LLDP</li> </ul>	Yes Yes Yes
Interrupts/diagnostics/status information	
Status indicator	Yes
Alarms	Yes
Diagnostics function	Yes
Diagnostics indication LED	
<ul style="list-style-type: none"> <li>RUN LED</li> <li>ERROR LED</li> <li>MAINT LED</li> <li>ACT LED</li> <li>Monitoring of the supply voltage (PWR-LED)</li> <li>Connection display LINK TX/RX</li> </ul>	Yes; green LED Yes; red LED Yes; Yellow LED Yes; green LED Yes; green PWR LED Yes; 2x green link LEDs on BusAdapter
Potential separation	
between PROFINET and all other circuits	Yes
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)
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>horizontal installation, min.</li> <li>horizontal installation, max.</li> <li>vertical installation, min.</li> <li>vertical installation, max.</li> </ul>	-30 °C 60 °C -30 °C 50 °C

Altitude during operation relating to sea level

- Installation altitude above sea level, max. 2 000 m; On request: Installation altitudes greater than 2 000 m

Dimensions

Width	50 mm
Height	138 mm
Depth	89 mm

Weights

Weight, approx.	192 g; without BusAdapter
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**last modified:** 12/19/2022 