



SIMATIC ET 200SP, PROFINET interface module IM 155-6PN Basic, Max. 12 I/O modules, 2x integrated RJ45 sockets incl. server module

General information	
Product type designation	IM 155-6 PN BA
HW functional status	from FS04
Firmware version	
<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; Single 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>	V13 SP1
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated from version</li> </ul>	V5.5 SP4
<ul style="list-style-type: none"> <li>PROFINET from GSD version/GSD revision</li> </ul>	GSDML V2.31
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	
<ul style="list-style-type: none"> <li>Mains/voltage failure stored energy time</li> </ul>	5 ms
Input current	
Current consumption, max.	300 mA
I <sup>2</sup> t	0.09 A <sup>2</sup> ·s
Power loss	
Power loss, typ.	1.8 W
Address area	
Address space per module	
<ul style="list-style-type: none"> <li>Address space per module, max.</li> </ul>	32 byte; For input and output data respectively
Address space per station	
<ul style="list-style-type: none"> <li>Address space per station, max.</li> </ul>	32 byte
Hardware configuration	
Rack	
<ul style="list-style-type: none"> <li>Quantity of operable ET 200SP modules, max.</li> </ul>	12
<ul style="list-style-type: none"> <li>Quantity of operable ET 200AL modules, max.</li> </ul>	0
Interfaces	
Number of PROFINET interfaces	1; 2 ports (switch)
1. Interface	

<b>Interface types</b>	
<ul style="list-style-type: none"> <li>• RJ 45 (Ethernet)</li> <li>• Number of ports</li> <li>• integrated switch</li> <li>• BusAdapter (PROFINET)</li> </ul>	<p>Yes; 2 integrated RJ45 ports</p> <p>2</p> <p>Yes</p> <p>No</p>
<b>Protocols</b>	
<ul style="list-style-type: none"> <li>• PROFINET IO Device</li> <li>• Open IE communication</li> <li>• Media redundancy</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes; PROFINET MRP</p>
<b>PROFINET IO Device</b>	
<b>Services</b>	
<ul style="list-style-type: none"> <li>— IRT</li> <li>— PROFIenergy</li> <li>— Prioritized startup</li> <li>— Shared device</li> </ul>	<p>No</p> <p>No</p> <p>No</p> <p>No</p>
<b>Interface types</b>	
<b>RJ 45 (Ethernet)</b>	
<ul style="list-style-type: none"> <li>• Transmission procedure</li> <li>• 100 Mbps</li> <li>• Autonegotiation</li> <li>• Autocrossing</li> </ul>	<p>PROFINET with 100 Mbit/s full duplex (100BASE-TX)</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
<b>Protocols</b>	
Modbus TCP	No
<b>Redundancy mode</b>	
<ul style="list-style-type: none"> <li>• PROFINET system redundancy (S2)</li> </ul>	No
<b>Media redundancy</b>	
<ul style="list-style-type: none"> <li>— MRP</li> <li>— MRPD</li> </ul>	<p>Yes</p> <p>No</p>
<b>Open IE communication</b>	
<ul style="list-style-type: none"> <li>• TCP/IP</li> <li>• SNMP</li> <li>• LLDP</li> </ul>	<p>Yes</p> <p>Yes</p> <p>Yes</p>
<b>Interrupts/diagnostics/status information</b>	
Status indicator	Yes
Alarms	Yes
Diagnostics function	Yes
<b>Diagnostics indication LED</b>	
<ul style="list-style-type: none"> <li>• RUN LED</li> <li>• ERROR LED</li> <li>• MAINT LED</li> <li>• Monitoring of the supply voltage (PWR-LED)</li> <li>• Connection display LINK TX/RX</li> </ul>	<p>Yes; green LED</p> <p>Yes; red LED</p> <p>Yes; Yellow LED</p> <p>Yes; green PWR LED</p> <p>Yes; 2x green link LEDs on BusAdapter</p>
<b>Potential separation</b>	
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
<b>Permissible potential difference</b>	
between different circuits	Safety extra low voltage SELV
<b>Isolation</b>	
Isolation tested with	707 V DC (type test)
<b>Standards, approvals, certificates</b>	
Network loading class	2
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
<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>	<p>-30 °C; No condensation</p> <p>60 °C</p> <p>-30 °C; No condensation</p> <p>50 °C</p>
<b>Altitude during operation relating to sea level</b>	
<ul style="list-style-type: none"> <li>• Installation altitude above sea level, max.</li> </ul>	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual

connection method	
ET-Connection	
• via BU/BA Send	No
Dimensions	
Width	35 mm
Height	117 mm
Depth	74 mm
Weights	
Weight, approx.	125 g

**last modified:** 8/8/2023 