



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 and higher
<ul style="list-style-type: none"> <li>PROFINET from GSD version/GSD revision</li> </ul>	V2.3 / -
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
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; per input / output
Address space per station	
<ul style="list-style-type: none"> <li>Address space per station, max.</li> </ul>	32 byte; per input / output
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></ul>	Yes; 2 integrated RJ45 ports
<ul style="list-style-type: none"><li>• Number of ports</li></ul>	2
<ul style="list-style-type: none"><li>• integrated switch</li></ul>	Yes
<ul style="list-style-type: none"><li>• BusAdapter (PROFINET)</li></ul>	No
<b>Protocols</b>	
<ul style="list-style-type: none"><li>• PROFINET IO Device</li></ul>	Yes
<ul style="list-style-type: none"><li>• Open IE communication</li></ul>	Yes
<ul style="list-style-type: none"><li>• Media redundancy</li></ul>	Yes; PROFINET MRP
<b>Interface types</b>	
RJ 45 (Ethernet)	
<ul style="list-style-type: none"><li>• Transmission procedure</li></ul>	PROFINET with 100 Mbit/s full duplex (100BASE-TX)
<ul style="list-style-type: none"><li>• 10 Mbps</li></ul>	No
<ul style="list-style-type: none"><li>• 100 Mbps</li></ul>	Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX)
<ul style="list-style-type: none"><li>• Autonegotiation</li></ul>	Yes
<ul style="list-style-type: none"><li>• Autocrossing</li></ul>	Yes
<b>Protocols</b>	
PROFINET IO Device	
Services	
<ul style="list-style-type: none"><li>— IRT</li></ul>	No
<ul style="list-style-type: none"><li>— PROFIenergy</li></ul>	No
<ul style="list-style-type: none"><li>— Prioritized startup</li></ul>	No
<ul style="list-style-type: none"><li>— Shared device</li></ul>	No
Redundancy mode	
<ul style="list-style-type: none"><li>• PROFINET system redundancy (S2)</li></ul>	No
Media redundancy	
<ul style="list-style-type: none"><li>— MRP</li></ul>	Yes
<ul style="list-style-type: none"><li>— MRPD</li></ul>	No
Open IE communication	
<ul style="list-style-type: none"><li>• TCP/IP</li></ul>	Yes
<ul style="list-style-type: none"><li>• SNMP</li></ul>	Yes
<ul style="list-style-type: none"><li>• LLDP</li></ul>	Yes
<b>Isochronous mode</b>	
Equidistance	No
<b>Interrupts/diagnostics/status information</b>	
Status indicator	Yes
Alarms	Yes
Diagnostics function	Yes
Diagnostics indication LED	
<ul style="list-style-type: none"><li>• RUN LED</li></ul>	Yes; green LED
<ul style="list-style-type: none"><li>• ERROR LED</li></ul>	Yes; red LED
<ul style="list-style-type: none"><li>• MAINT LED</li></ul>	Yes; Yellow LED
<ul style="list-style-type: none"><li>• Monitoring of the supply voltage (PWR-LED)</li></ul>	Yes; green PWR LED
<ul style="list-style-type: none"><li>• Connection display LINK TX/RX</li></ul>	Yes; 2x green link LEDs on BusAdapter
<b>Potential separation</b>	
between backplane bus and electronics	No
between PROFINET and all other circuits	Yes
between supply and all other circuits	No
<b>Standards, approvals, certificates</b>	
Network loading class	2
<b>Ambient conditions</b>	
Ambient temperature during operation	
<ul style="list-style-type: none"><li>• horizontal installation, min.</li></ul>	-30 °C
<ul style="list-style-type: none"><li>• horizontal installation, max.</li></ul>	60 °C
<ul style="list-style-type: none"><li>• vertical installation, min.</li></ul>	-30 °C
<ul style="list-style-type: none"><li>• vertical installation, max.</li></ul>	50 °C
Altitude during operation relating to sea level	
<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 / header	
ET-Connection	
• via BU/BA Send	No
Dimensions	
Width	35 mm
Height	117 mm
Depth	74 mm
Weights	
Weight, approx.	125 g
<b>last modified:</b>	3/2/2021 