



SIMATIC ET 200SP, PROFINET interface module IM 155-6 PN Basic, max. 16 I/O modules, 2x integrated RJ45 sockets PN security class 1 including server module (6ES7193-6PA00-0AA0)

General information	
Product type designation	IM 155-6 PN BA
Firmware version	V6.4.0
<ul style="list-style-type: none"> <li>FW update possible</li> </ul>	Yes
Vendor identification (VendorID)	0x002A
Device identifier (DeviceID)	0x0313
Product function	
<ul style="list-style-type: none"> <li>I&amp;M data</li> </ul>	Yes; I&M0 to I&M4
<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>	Yes
<ul style="list-style-type: none"> <li>IRT</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Local coupling, IO data</li> </ul>	Yes
<ul style="list-style-type: none"> <li>— Number of coupling modules</li> </ul>	6; 1x output + max. 5x input
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul>	V20
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated from version</li> </ul>	V5.7 SP3
<ul style="list-style-type: none"> <li>PROFINET from GSD version/GSD revision</li> </ul>	GSDML V2.45
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 (rated value)	200 mA
Current consumption, max.	300 mA
Inrush current, max.	1 A
$I^2t$	0.05 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>	128 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>	128 byte

Hardware configuration	
Rack	
• Quantity of operable ET 200SP modules, max.	16
• 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; 2 integrated RJ45 ports
• Number of ports	2; integrated RJ45 ports
• integrated switch	Yes
• BusAdapter (PROFINET)	No
Protocols	
• PROFINET IO Device	Yes
• Open IE communication	Yes
• Media redundancy	Yes; PROFINET MRP client
PROFINET IO Device	
Services	
— IRT	Yes; 1 ms to 4 ms at an interval of 125 µs
— Dynamic Frame Packing (DFP)	Yes
— Fast Forwarding	Yes
— Fragmentation	Yes
— PROFIenergy	Yes
— Prioritized startup	Yes
— 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	No
PROFIBUS	No
EtherNet/IP	No
Modbus TCP	No
Redundancy mode	
• PROFINET system redundancy (S2)	No
• PROFINET system redundancy (R1)	No
Media redundancy	
— MRP	Yes
— MRPD	Yes
Open IE communication	
• TCP/IP	Yes
• UDP	Yes
• SNMP	Yes
• LLDP	Yes
• ARP	Yes
• IGMP	Yes
• Multicast	Yes
• Broadcast	Yes
• IPv4	Yes
• IPv6	No
Interrupts/diagnostics/status information	
Status indicator	Yes

Alarms	Yes
Diagnostics function	Yes
<b>Diagnostics indication LED</b>	
• RUN LED	Yes; green LED
• ERROR LED	Yes; red LED
• MAINT LED	Yes; Yellow LED
• Monitoring of the supply voltage (PWR-LED)	Yes; green PWR LED
• Connection display LINK TX/RX	Yes; 2x green LED
<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	3
<b>Security</b>	
PROFINET Security Class	1
signed firmware update	Yes
Secure Boot	No
safely removing data	Yes
data integrity	Yes
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
• horizontal installation, min.	-30 °C; No condensation
• horizontal installation, max.	60 °C
• vertical installation, min.	-30 °C; No condensation
• vertical installation, max.	50 °C
<b>Altitude during operation relating to sea level</b>	
• Installation altitude above sea level, max.	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
<b>Connection method</b>	
<b>ET-Connection</b>	
• via BU/BA Send	No
<b>Mechanics/material</b>	
Strain relief	No
<b>Dimensions</b>	
Width	35 mm
Height	117 mm
Depth	74 mm
<b>Weights</b>	
Weight, approx.	125 g
<b>Classifications</b>	

	Version	Classification
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
ETIM	9	EC001604
ETIM	8	EC001604
ETIM	7	EC001604

Approvals / Certificates

General Product Approval



[Manufacturer Declaration](#)

[Miscellaneous](#)



[PROFINET](#)

General Product Approval

EMV



[China RoHS](#)



For use in hazardous locations



[CCC-Ex](#)

[FM](#)



IECEX

[Miscellaneous](#)

For use in hazardous locations

Maritime application

[Type Examination Certificate](#)

[CCC-Ex](#)



ABS



BUREAU VERITAS



DNV



LRS

Maritime application

[NK / Nippon Kaiji Kyokai](#)



RINA



RMRS

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

[KR \(Korean Register of Shipping\)](#)

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