

SIMATIC ET 200SP, PROFINET INTERFACE MODULE IM155-6PN  
STANDARD, MAX. 32 PERIPHERY MODULES, INCL.  
SERVERMODUL, INCL. BUSADAPTER BA 2X RJ45

General information	
Product type designation	IM 155-6 PN ST with BA 2xRJ45 and server module
Firmware version	V3.3
Product function	
<ul style="list-style-type: none"> <li>I&amp;M data</li> </ul>	Yes; I&M0 to I&M3
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated as of version</li> </ul>	V13 SP1
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated as of version</li> </ul>	V5.5 SP4 and higher
<ul style="list-style-type: none"> <li>PROFINET as of 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	

• Mains/voltage failure stored energy time	5 ms
<b>Input current</b>	
Current consumption, max.	450 mA
Inrush current, max.	3.7 A
$I^2t$	0.09 A <sup>2</sup> ·s
<b>Power loss</b>	
Power loss, typ.	1.9 W
<b>Address area</b>	
Address space per module	
• Address space per module, max.	256 byte; per input / output
Address space per station	
• Address space per station, max.	512 byte; Dependent on configuration
<b>Hardware configuration</b>	
Rack	
• Modules per rack, max.	32; + 16 ET 200AL modules
Submodules	
• Number of submodules per station, max.	256
<b>Interfaces</b>	
Number of PROFINET interfaces	1; 2 ports (switch)
<b>1. Interface</b>	
Interface types	
• Number of ports	2
• integrated switch	Yes
• RJ 45 (Ethernet)	Yes; Pre-assembled BusAdapter BA 2x RJ45
• Bus adapter (PROFINET)	Yes; Applicable BusAdapters: BA 2x RJ45, BA 2x FC
Functionality	
• PROFINET IO Device	Yes
• Open IE communication	Yes
• Media redundancy	Yes; PROFINET MRP
<b>Interface types</b>	
RJ 45 (Ethernet)	
• 10 Mbps	Yes; for Ethernet services
• 100 Mbps	Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• Transmission procedure	PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• Autonegotiation	Yes
• Autocrossing	Yes
<b>Protocols</b>	
PROFINET IO Device	
Services	

— Isochronous mode	No
— Open IE communication	Yes
— IRT	Yes; with send cycles of between 250 µs and 4 ms in increments of 125 µs
— MRP	Yes
— MRPD	No
— PROFINET system redundancy	No
— PROFINergy	Yes
— Prioritized startup	Yes
— Shared device	Yes
— Number of IO Controllers with shared device, max.	2
<b>Open IE communication</b>	
• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes
<b>Isochronous mode</b>	
Isochronous operation (application synchronized up to terminal)	No
<b>Interrupts/diagnostics/status information</b>	
Status indicator	Yes
Alarms	Yes
Diagnostic functions	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 LED
• Connection display LINK TX/RX	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	Yes
<b>Permissible potential difference</b>	
between different circuits	75 V DC/60 V AC (base isolation)
<b>Isolation</b>	
Isolation tested with	707 V DC between supply voltage and electronics; 1 500 V AC between Ethernet and electronics
<b>Standards, approvals, certificates</b>	
Network loading class	2

Security level	According to Security Level 1 Test Cases V1.1.1
<b>Ambient conditions</b>	
Ambient temperature during operation	
• horizontal installation, min.	0 °C
• horizontal installation, max.	60 °C
• vertical installation, min.	0 °C
• vertical installation, max.	50 °C
<b>Connection method</b>	
ET-Connection	
• via BU/BA Send	Yes; + 16 ET 200AL modules
<b>Dimensions</b>	
Width	50 mm
Height	117 mm
Depth	74 mm
<b>Weights</b>	
Weight, approx.	191 g; IM155PN ST with BA 2x RJ45 (mounted)
<b>last modified:</b>	14.05.2016