

SIMATIC ET 200SP, PROFINET interface module IM 155-6PN
Standard, max. 32 I/O modules, incl. server module



General information	
Product type designation	IM 155-6 PN ST
Firmware version	V3.3
Product function	
I&M data	Yes; I&M0 to I&M3
Module swapping during operation (hot swapping)	Yes; Single hot swapping
Engineering with	
STEP 7 TIA Portal configurable/integrated as of version	V13 SP1
STEP 7 configurable/integrated as of version	V5.5 SP4 and higher
PROFINET as of GSD version/GSD revision	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
Input current	
Current consumption, max.	450 mA
Inrush current, max.	3.7 A
I^2t	0.09 A ² ·s
Power loss	
Power loss, typ.	1.9 W
Address area	
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
Hardware configuration	
Rack	
• Modules per rack, max.	32; + 16 ET 200AL modules
Submodules	
• Number of submodules per station, max.	256
Interfaces	
Number of PROFINET interfaces	1; 2 ports (switch)
1. Interface	
Interface types	
• Number of ports	2
• integrated switch	Yes
• BusAdapter (PROFINET)	Yes; Applicable BusAdapter: BA 2x RJ45, BA 2x FC
Functionality	
• PROFINET IO Device	Yes
• Open IE communication	Yes
• Media redundancy	Yes; PROFINET MRP
Interface types	
RJ 45 (Ethernet)	
• Transmission procedure	PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• 10 Mbps	No
• 100 Mbps	Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• Autonegotiation	Yes
• Autocrossing	Yes
Protocols	
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
— PROFinergy	Yes
— Prioritized startup	Yes
— Shared device	Yes
— Number of IO Controllers with shared device, max.	2
Redundancy mode	
— MRP	Yes
— MRPD	No
— PROFINET system redundancy (S2)	No
Open IE communication	
• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes
Isochronous mode	
Isochronous operation (application synchronized up to terminal)	No
Equidistance	No
Interrupts/diagnostics/status information	
Status indicator	Yes
Alarms	Yes
Diagnostic functions	Yes
Diagnostics indication LED	
• 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 link LEDs on BusAdapter
Potential separation	
between backplane bus and electronics	No
between PROFINET and all other circuits	Yes
between supply and all other circuits	Yes
Isolation	
Isolation tested with	707 V DC between supply voltage and electronics; 1 500 V AC between Ethernet and electronics
Standards, approvals, certificates	
Network loading class	2

Security level	According to Security Level 1 Test Cases V1.1.1
Ambient conditions	
Ambient temperature during operation	
• horizontal installation, min.	0 °C
• horizontal installation, max.	60 °C
• vertical installation, min.	0 °C
• vertical installation, max.	50 °C
Connection method	
ET-Connection	
• via BU/BA Send	Yes; + 16 ET 200AL modules
Dimensions	
Width	50 mm
Height	117 mm
Depth	74 mm
Weights	
Weight, approx.	147 g; without BusAdapter
last modified:	05/22/2018