Data sheet

*** Spare part *** 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
l²t	0.09 A²·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
Protocols	
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
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Protocols

PROFINET IO Device



Services	
— Isochronous mode	No
	Yes
— Open IE communication— IRT	Yes; with send cycles of between 250 µs and 4 ms in increments
— 11(1	of 125 µs
— PROFlenergy	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
	Yes
• LLDP	165
Isochronous mode	
Isochronous operation (application synchronized up	No
to terminal)	
Equidistance	No
Interrupts/diagnostics/status information	
Status indicator	Yes
Alarms	Yes
Diagnostics function	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
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Standards, approvals, certificates Network loading class	2
Network loading class	_



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	

147 g; without BusAdapter

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Weight, approx.

last modified: