SIEMENS

SIMATIC ET 200SP, BUNDLE PROFINET IM, IM155-6PN ST, MAX. 32 PERIPHERY MODULES AND 16 ET 200AL MODULES, SINGLE HOT SWAP, BUNDLE CONTAINS: INTERFACEMODULE (6ES7155-6AU00-0BN0), SERVERMODULE (6ES7193-6PA00-0AA0), BUSADAPTER BA 2X RJ45 (6ES7193-6AR00-0AA0)

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
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
I²t	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
● RJ 45 (Ethernet)	Yes; Pre-assembled BusAdapter BA 2x RJ45
● 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

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— 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
— PROFIenergy	Yes
— Prioritized startup	Yes
— Shared device	Yes
— Number of IO Controllers with shared device, max.	2

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

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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.	191 g; IM155PN ST with BA 2x RJ45 (mounted)
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