SIEMENS

Data sheet

6ES7155-6AU00-0BN0

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



General information	
Product type designation	IM 155-6 PN ST with server module
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
	0.09 A²·s
Power loss	
Power loss, typ.	1.9 W
Address	
Address area Address space per module	
Address space per module, max.	256 byte; per input / output
Address space per module, max.	200 syto, por impat/ output
Address space per station, max.	512 byte; Dependent on configuration
Address space per station, max.	one system beginning the 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	
1. Interface Interface types	
	2
Interface types	2 Yes
Interface types • Number of ports	
Interface types • Number of ports • integrated switch	Yes
Interface types • Number of ports • integrated switch • BusAdapter (PROFINET)	Yes
Interface types • Number of ports • integrated switch • BusAdapter (PROFINET) Functionality	Yes; Applicable BusAdapter: BA 2x RJ45, BA 2x FC
Interface types • Number of ports • integrated switch • BusAdapter (PROFINET) Functionality • PROFINET IO Device	Yes; Applicable BusAdapter: BA 2x RJ45, BA 2x FC Yes
Interface types • Number of ports • integrated switch • BusAdapter (PROFINET) Functionality • PROFINET IO Device • Open IE communication • Media redundancy	Yes Yes; Applicable BusAdapter: BA 2x RJ45, BA 2x FC Yes Yes
Interface types • Number of ports • integrated switch • BusAdapter (PROFINET) Functionality • PROFINET IO Device • Open IE communication	Yes Yes; Applicable BusAdapter: BA 2x RJ45, BA 2x FC Yes Yes
Interface types • Number of ports • integrated switch • BusAdapter (PROFINET) Functionality • PROFINET IO Device • Open IE communication • Media redundancy Interface types RJ 45 (Ethernet)	Yes Yes; Applicable BusAdapter: BA 2x RJ45, BA 2x FC Yes Yes
Interface types • Number of ports • integrated switch • BusAdapter (PROFINET) Functionality • PROFINET IO Device • Open IE communication • Media redundancy Interface types RJ 45 (Ethernet) • Transmission procedure	Yes Yes; Applicable BusAdapter: BA 2x RJ45, BA 2x FC Yes Yes Yes Yes; PROFINET MRP
Interface types • Number of ports • integrated switch • BusAdapter (PROFINET) Functionality • PROFINET IO Device • Open IE communication • Media redundancy Interface types RJ 45 (Ethernet) • Transmission procedure • 10 Mbps	Yes Yes; Applicable BusAdapter: BA 2x RJ45, BA 2x FC Yes Yes Yes; PROFINET MRP PROFINET with 100 Mbit/s full duplex (100BASE-TX) No
Interface types • Number of ports • integrated switch • BusAdapter (PROFINET) Functionality • PROFINET IO Device • Open IE communication • Media redundancy Interface types RJ 45 (Ethernet) • Transmission procedure • 10 Mbps • 100 Mbps	Yes; Applicable BusAdapter: BA 2x RJ45, BA 2x FC Yes Yes Yes; PROFINET MRP PROFINET with 100 Mbit/s full duplex (100BASE-TX) No Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX)
Interface types • Number of ports • integrated switch • BusAdapter (PROFINET) Functionality • PROFINET IO Device • Open IE communication • Media redundancy Interface types RJ 45 (Ethernet) • Transmission procedure • 10 Mbps • 100 Mbps • Autonegotiation	Yes Yes; Applicable BusAdapter: BA 2x RJ45, BA 2x FC Yes Yes Yes; PROFINET MRP PROFINET with 100 Mbit/s full duplex (100BASE-TX) No
Interface types • Number of ports • integrated switch • BusAdapter (PROFINET) Functionality • PROFINET IO Device • Open IE communication • Media redundancy Interface types RJ 45 (Ethernet) • Transmission procedure • 10 Mbps • 100 Mbps • Autonegotiation • Autocrossing	Yes; Applicable BusAdapter: BA 2x RJ45, BA 2x FC Yes Yes Yes; PROFINET MRP PROFINET with 100 Mbit/s full duplex (100BASE-TX) No Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX) Yes
Interface types • Number of ports • integrated switch • BusAdapter (PROFINET) Functionality • PROFINET IO Device • Open IE communication • Media redundancy Interface types RJ 45 (Ethernet) • Transmission procedure • 10 Mbps • 100 Mbps • Autonegotiation • Autocrossing Protocols	Yes; Applicable BusAdapter: BA 2x RJ45, BA 2x FC Yes Yes Yes; PROFINET MRP PROFINET with 100 Mbit/s full duplex (100BASE-TX) No Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX) Yes
Interface types • Number of ports • integrated switch • BusAdapter (PROFINET) Functionality • PROFINET IO Device • Open IE communication • Media redundancy Interface types RJ 45 (Ethernet) • Transmission procedure • 10 Mbps • 100 Mbps • Autonegotiation • Autocrossing Protocols PROFINET IO Device	Yes; Applicable BusAdapter: BA 2x RJ45, BA 2x FC Yes Yes Yes; PROFINET MRP PROFINET with 100 Mbit/s full duplex (100BASE-TX) No Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX) Yes
Interface types • Number of ports • integrated switch • BusAdapter (PROFINET) Functionality • PROFINET IO Device • Open IE communication • Media redundancy Interface types RJ 45 (Ethernet) • Transmission procedure • 10 Mbps • 100 Mbps • Autonegotiation • Autocrossing Protocols	Yes; Applicable BusAdapter: BA 2x RJ45, BA 2x FC Yes Yes Yes; PROFINET MRP PROFINET with 100 Mbit/s full duplex (100BASE-TX) No Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX) Yes

Open IE communication	Yes
— Open IE communication	
— IRT	Yes; with send cycles of between 250 μ s and 4 ms in increments of 125 μ s
— MRP	Yes
— MRPD	No
 — PROFINET system redundancy 	No
— PROFlenergy	Yes
Prioritized startup	Yes
— Shared device	Yes
Number of IO Controllers with shared	2
device, max.	
Open IE communication	
• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes
Isochronous mode	
Isochronous operation (application synchronized up	No
to terminal)	
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 0 °C • horizontal installation, min. 60 °C • horizontal installation, max. 0°C • vertical installation, min. 50 °C • vertical installation, max.

ET-Connection

Yes; + 16 ET 200AL modules • via BU/BA Send

Dimensions	
Width	50 mm
Height	117 mm
Depth	74 mm

Weights

Weight, approx. 147 g; without BusAdapter

08/12/2017 last modified: