SIEMENS

Data sheet 6ES7155-6AR00-0AN0

SIMATIC ET 200SP, PROFINET interface module IM 155-6PN Basic, Max. 12 I/O modules, 2x integrated RJ45 sockets incl. server module

General information	
Product type designation	IM 155-6 PN BA
HW functional status	from FS04
Firmware version	
● FW update possible	Yes
Product function	
● I&M data	Yes; I&M0 to I&M3
● Module swapping during operation (hot swapping)	Yes; Single hot swapping
● Isochronous mode	No
Engineering with	
● STEP 7 TIA Portal configurable/integrated from version	V13 SP1
● STEP 7 configurable/integrated from version	V5.5 SP4
● PROFINET from GSD version/GSD revision	GSDML V2.31
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
Short-circuit protection	Yes
Mains buffering	
● Mains/voltage failure stored energy time	5 ms
Input current	
Current consumption, max.	300 mA
I^2t	0.09 $A^2 \cdot s$
Power loss	
Power loss, typ.	1.8 W
Address area	
Address space per module	
● Address space per module, max.	32 byte; For input and output data respectively
Address space per station	
● Address space per station, max.	32 byte
Hardware configuration	
Rack	
● Quantity of operable ET 200SP modules, max.	12
● Quantity of operable ET 200AL modules, max.	0
Interfaces	
Number of PROFINET interfaces	1; 2 ports (switch)
1. Interface	

Interface types	
● RJ 45 (Ethernet)	Yes; 2 integrated RJ45 ports
● Number of ports	2; integrated RJ45 ports
● integrated switch	Yes
● BusAdapter (PROFINET)	No
Protocols	
● PROFINET IO Device	Yes
● Open IE communication	Yes
● Media redundancy	Yes; PROFINET MRP client
PROFINET IO Device	
Services	
— IRT	No
— PROFIenergy	No
— Prioritized startup	No
— Shared device	No
Interface types	
RJ 45 (Ethernet)	
● Transmission procedure	PROFINET with 100 Mbit/s full duplex (100BASE-TX)
● 100 Mbps	Yes
● Autonegotiation	Yes
● Autocrossing	Yes
Protocols	
Modbus TCP	No
Redundancy mode	
● PROFINET system redundancy (S2)	No
Media redundancy	
— MRP	Yes
— MRPD	No
Open IE communication	
● TCP/IP	Yes
● SNMP	Yes
● LLDP	Yes
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; 1500 V AC (type test)
between supply and all other circuits	No
Permissible potential difference	
between different circuits	Safety extra low voltage SELV
Isolation	
Isolation tested with	707 V DC (type test)
Standards, approvals, certificates	
Network loading class	2
Ambient conditions	
Ambient temperature during operation	
● horizontal installation, min.	-30 °C; No condensation
● horizontal installation, max.	60 °C
● vertical installation, min.	-30 °C; No condensation
● vertical installation, max.	50 °C
Altitude during operation relating to sea level	
● Installation altitude above sea level, max.	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual

connection method	
ET-Connection	
● via BU/BA Send	No
Dimensions	
Width	35 mm
Height	117 mm
Depth	74 mm
Weights	
Weight, approx.	125 g

last modified: 5/22/2024