SIEMENS

Data sheet 6ES7155-6AU00-0DN0

SIMATIC ET 200SP, PROFINET interface module IM155-6PN High Speed max. 30 I/O modules, 0.125 ms isochronous mode Multi-hotswap, incl. server module

General information	
Product type designation	IM 155-6 PN HS
HW functional status	From FS02
Firmware version	V4.0
● FW update possible	Yes
Product function	
● I&M data	Yes; I&M0 to I&M3
● Module swapping during operation (hot swapping)	Yes; Multi-hot swapping
● Isochronous mode	Yes
Engineering with	
● STEP 7 TIA Portal configurable/integrated from version	STEP 7 V14 or higher
● STEP 7 configurable/integrated from version	V5.5 SP4 and higher
● PROFINET from 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.	500 mA
Inrush current, max.	4.5 A
I^2t	0.09 $A^2 \cdot s$
Power loss	
Power loss, typ.	1.7 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.	968 byte; For input and output data respectively
Hardware configuration	
Rack	
● Quantity of operable ET 200SP modules, max.	30
● Quantity of operable ET 200AL modules, max.	0
Submodules	
● Number of submodules per station, max.	125

Interfaces	
Number of PROFINET interfaces	1; 2 ports (switch)
1. Interface	
Interface types	
● Number of ports	2
● integrated switch	Yes
● BusAdapter (PROFINET)	Yes; Compatible BusAdapter: BA 2x RJ45, BA 2x FC, BA 2x SCRJ, BA SCRJ / RJ45, BA SCRJ / FC, BA 2x LC, BA LC / RJ45, BA LC / FC
Protocols	
● PROFINET IO Device	Yes
● Open IE communication	Yes
● Media redundancy	Yes; As MRP or MRPD client; max. 50 or 30 devices in the ring
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	
— IRT	Yes; 125 µs, 250 µs, 500 µs, 1 ms, 2 ms, 4 ms additionally with IRT with high performance: 250 µs to 4 ms in 125 µs frame
— PROFIenergy	Yes
— Prioritized startup	Yes
— Shared device	Yes
— Number of IO Controllers with shared device, max.	4
Redundancy mode	
● PROFINET system redundancy (S2)	No
Media redundancy	
— MRP	Yes
— MRPD	Yes
Open IE communication	
● TCP/IP	Yes
● SNMP	Yes
● LLDP	Yes
Isochronous mode	
Equidistance	Yes
shortest clock pulse	125 µs
max. cycle	4 ms
Bus cycle time (TDP), min.	125 µs
Jitter, max.	0.25 µs
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	No
Isolation	
Isolation tested with	707 V DC between supply voltage and electronics (type test); 1 500 V AC between Ethernet and electronics (type test)
Standards, approvals, certificates	

Network loading class	3
Security level	According to Security Level 1 Test Cases V1.1.1
Ambient conditions	
Ambient temperature during operation	
● horizontal installation, min.	-25 °C; No condensation
● horizontal installation, max.	60 °C
● vertical installation, min.	-25 °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 / header	
ET-Connection	
● via BU/BA Send	No
Dimensions	
Width	50 mm
Height	117 mm
Depth	74 mm
Weights	
Weight, approx.	147 g; without BusAdapter

last modified: 3/2/2021