SIEMENS

Data sheet 6ES7155-6AU00-0CN0

*** Spare part *** SIMATIC ET 200SP, PROFINET interface module IM 155-6PN High Feature max. 64 I/O modules, 0.25 ms isochronous mode Multi-hotswap, incl. server module

General information	
Product type designation	IM 155-6 PN HF
Firmware version	V3.3
Product function	
• I&M data	Yes; I&M0 to I&M4
• Module swapping during operation (hot swapping)	Yes; Multi-hot swapping
Engineering with	
• STEP 7 TIA Portal configurable/integrated as of version	V13 SP1 Update 6
• 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.	700 mA
Inrush current, max.	4.5 A
I^2t	0.09 $A^2 \cdot s$

Power loss	
Power loss, typ.	2.4 W

Address area	
Address space per module	
• Address space per module, max.	288 byte; For input and output data respectively
Address space per station	
• Address space per station, max.	1 440 byte; Dependent on configuration

Hardware configuration	
Rack	
• Modules per rack, max.	64; + 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; Compatible BusAdapter: BA 2x RJ45, BA 2x FC, BA 2x SCRJ (from FS03, V2.2), BA SCRJ / RJ45 (from FS03, V3.1), BA SCRJ / FC (from FS03, V3.1), BA 2x LC (from FS03, V3.3), BA LC / RJ45 (from FS03, V3.3), BA LC / FC (from FS03, V3.3)
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

Protocols	
PROFINET IO Device	
Services	
— Isochronous mode	Yes; Bus cycle time: min. 250 µs
— Open IE communication	Yes
— IRT	Yes; 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	
• MRP	Yes
• MRPD	No
• PROFINET system redundancy (S2)	Yes; NAP S2
Open IE communication	
• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes
Isochronous mode	
Isochronous operation (application synchronized up to terminal)	Yes
Equidistance	Yes
shortest clock pulse	250 µs
max. cycle	4 ms
Bus cycle time (TDP), min.	250 µs
Jitter, max.	1 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 to network LINK (green)	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 (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.	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.	147 g; without BusAdapter

last modified: 09/12/2019