6ES7155-6AU01-0CN0

Data sheet



SIMATIC ET 200SP, PROFINET, 2-port interface module IM 155-6PN/2 High Feature, 1 slot for BusAdapter, max. 64 I/O modules and 16 ET 200AL modules, S2 redundancy, multi-hotswap, 0.25 ms, isochronous mode, optional PN strain relief, including server module

General information		
Product type designation II	M 155-6 PN/2 HF	
HW functional status	From FS02	
Firmware version \	V4.2	
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	
 Tool changer 	Yes; Docking station and docking unit	
Local coupling, IO data	No	
Local coupling, data records	No	
Engineering with		
STEP 7 TIA Portal configurable/integrated from version	STEP 7 V15.1 or higher	
• STEP 7 configurable/integrated from version	Configurable via GSD file	
PROFINET from GSD version/GSD revision	GSDML V2.3	
Configuration control		
via dataset Y	Yes	
Supply voltage		
Rated value (DC) 2	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 	10 ms	
Input current		
Current consumption, max. 7	700 mA	
Inrush current, max. 4	4.5 A	
I²t 0	0.25 A ² ·s	
Power loss		
Power loss, typ. 2	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		

 Quantity of operable ET 200SP modules, max. 	64
Quantity of operable ET 200AL modules, max.	16
Submodules	
Number of submodules per station, max.	256
ime stamping	
Accuracy	10 ms
nterfaces	
Number of PROFINET interfaces	1; 2 ports (switch)
. Interface	
Interface types	
Number of ports	2; via BusAdapter
integrated switch	Yes
BusAdapter (PROFINET)	Yes; compatible BusAdapters: BA 2x RJ45, BA 2x M12, BA 2x FC, BA 2x LC, BA LC/RJ45, BA LC/FC, BA 2x SCRJ, BA SCRJ/RJ45, BA SCRJ/FC,
Protocols	
PROFINET IO Device	Yes
Open IE communication	Yes
Media redundancy	Yes; PROFINET MRP
nterface 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
Autoriogonation Autocrossing	Yes
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Protocols	
Number of connections	40
 Number of MtM communication relationships/connections, max. 	16
PROFINET IO Device	
Services	
— IRT	Yes; 250 μ s, 500 μ s, 1 ms, 2 ms, 4 ms additionally with IRT with high performance: 250 μ s to 4 ms in 125 μ s frame
— PROFlenergy	Yes
 Prioritized startup 	Yes
 Shared device 	Yes
 Number of IO Controllers with shared device, max. 	4
Redundancy mode	
PROFINET system redundancy (S2)	Yes; NAP S2
H-Sync forwarding	Yes
Media redundancy	
— MRP	Yes
— MRPD	No
Open IE communication	
• TCP/IP	Yes
• SNMP	Yes
SNMPLLDP	Yes Yes
• LLDP	
LLDP sochronous mode	Yes
LLDP sochronous mode Equidistance	Yes
LLDP sochronous mode Equidistance shortest clock pulse	Yes 250 µs
LLDP sochronous mode Equidistance shortest clock pulse max. cycle	Yes Yes 250 µs 4 ms
LLDP sochronous mode Equidistance shortest clock pulse max. cycle Bus cycle time (TDP), min.	Yes Yes 250 µs 4 ms 250 µs
● LLDP sochronous mode Equidistance shortest clock pulse max. cycle Bus cycle time (TDP), min. Jitter, max.	Yes Yes 250 µs 4 ms
● LLDP sochronous mode Equidistance shortest clock pulse max. cycle Bus cycle time (TDP), min. Jitter, max. nterrupts/diagnostics/status information	Yes Yes 250 µs 4 ms 250 µs 1 µs
● LLDP sochronous mode Equidistance shortest clock pulse max. cycle Bus cycle time (TDP), min. Jitter, max. nterrupts/diagnostics/status information Status indicator	Yes Yes 250 µs 4 ms 250 µs 1 µs Yes
● LLDP sochronous mode Equidistance shortest clock pulse max. cycle Bus cycle time (TDP), min. Jitter, max. nterrupts/diagnostics/status information	Yes Yes 250 µs 4 ms 250 µs 1 µs

• 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 (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. 	-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 / header	
ET-Connection	
 via BU/BA Send 	Yes; + 16 ET 200AL modules
Mechanics/material	
Strain relief	Yes; Optional
Dimensions	
Width	50 mm
Height	117 mm
Depth	74 mm
Weights	
Weight, approx.	120 g; without BusAdapter

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last modified: