SIEMENS

Data sheet 6ES7155-6MU00-0CN0

SIMATIC ET 200SP, MultiFieldbus, 2-port interface module, IM 155-6MF High Feature, PN IO, Ethernet IP, Modbus TCP, 1 slot for BusAdapter, max. 64 I/O modules and 16 ET 200AL modules, multi-hot swap, optional cable grip, including server module

General information	
Product type designation	IM 155-6 MF HF
Firmware version	V5.2
● FW update possible	Yes
Vendor identification (VendorID)	002AH
Device identifier (DeviceID)	0313H
Manufacturer ID according to ODVA (VendorID)	04E3H
Device ID according to ODVA (Product code)	0FA2H
Product function	
● I&M data	Yes; I&M0 to I&M3
● Module swapping during operation (hot swapping)	Yes; Multi-hot swapping
● Isochronous mode	No
● Tool changer	Yes; Docking station and docking unit
● Local coupling, IO data	Yes
— Number of coupling modules	6; 1x output + max. 5x input
Engineering with	
● STEP 7 TIA Portal configurable/integrated from version	via IM155-6PN/2 HF in compatibility mode
● STEP 7 configurable/integrated from version	via IM155-6PN/2 HF in compatibility mode
● PROFINET from GSD version/GSD revision	GSDML V2.3
● Multi Fieldbus Configuration Tool (MFCT)	from V1.3
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
Short-circuit protection	Yes
Mains buffering	
● Mains/voltage failure stored energy time	10 ms; according to IEC 61131-2 (6.2.1.3) severity degree PS2
Input current	
Current consumption, max.	700 mA
Inrush current, max.	4.5 A
I^2t	0.25 $A^2 \cdot s$
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
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
Interfaces	
Number of PROFINET interfaces	1; 2 ports (switch)
1. Interface	
Interface types	
● RJ 45 (Ethernet)	Yes; with BusAdapter
● Number of ports	2; with BusAdapter
● integrated switch	Yes
● BusAdapter (PROFINET)	Yes
Protocols	
● PROFINET IO Device	Yes
● Open IE communication	Yes
● Media redundancy	Yes; PROFINET MRP client
PROFINET IO Device	
Services	
— IRT	No
— PROFIenergy	Yes
— Prioritized startup	No
— Shared device	Yes
— Number of IO Controllers with shared device, max.	14; 2x PN controller + 2x EtherNet/IP scanner + 10x Modbus TCP master
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	Yes
Number of connections	
● Number of MtM communication relationships/connections, max.	16
Redundancy mode	
● PROFINET system redundancy (S2)	Yes; NAP S2
● H-Sync forwarding	Yes
Media redundancy	
— MRP	Yes
— MRPD	No
EtherNet/IP	
Services	
— CIP Implicit Messaging	Yes
— CIP Explicit Messaging	Yes
— CIP Safety	No
— Configuration control via Explicit Messaging	No
— Shared device	Yes; 2x PN controller + 2x EtherNet/IP scanner + 10x Modbus TCP master
— Number of scanners with shared device, max.	2
Updating times	
— Requested Packet Interval (RPI)	2 ms
Address area	
— Address space per module, max.	288 byte; (246 byte outputs / 288 byte inputs)
— ForwardOpen (Class1 & 32 bit Header)	500 byte; (246 byte outputs / 500 byte inputs)
— LargeForwardOpen (Class3)	4 002 byte
Connections	
— Number of rack connections	2
Modbus TCP	
Services	

— read coils (code=1)	Yes
— read discrete inputs (code=2)	Yes
— Read Holding Registers (Code=3)	Yes
— write single coil (code=5)	Yes
— write multiple coils (code=15)	Yes
— Write Multiple Registers (Code=16)	Yes
— Parameter change by master	Yes
— Modbus TCP Security Protocol	No
Address space per station	
— Address space per station, max.	500 byte; (246 byte outputs / 500 byte inputs)
— Access-consistent address space	250 byte; (246 byte outputs / 250 byte inputs)
Updating time	
— I/O request interval	2 ms
Connections	
— Number of connections per slave	9; (1x inputs / 2x outputs / 4x volatile registers / 2x Device Info)
Open IE communication	
● TCP/IP	Yes
● UDP	Yes
● SNMP	Yes
● LLDP	Yes
● ARP	Yes
● IGMP	Yes
● Multicast	Yes
● Broadcast	Yes
● IPv4	Yes
● IPv6	No
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
● NS LED	Yes; green/red LED
● MS LED	Yes; green/red LED
● IO LED	Yes; red-green-yellow 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	3
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	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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