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
● Local coupling, data records	No
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
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; 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
Time stamping	
Accuracy	10 ms
Interfaces	
Number of PROFINET interfaces	1; 2 ports (switch)
1. Interface	
Interface types	
● Number of ports	2; via BusAdapter
● integrated switch	Yes
● BusAdapter (PROFINET)	Yes
Protocols	
● PROFINET IO Device	Yes
● Open IE communication	Yes
● Media redundancy	Yes
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	
Modbus TCP	Yes
Number of connections	
● Number of MtM communication relationships/connections, max.	16
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
Redundancy mode	
● PROFINET system redundancy (S2)	Yes; NAP S2
— on S7-1500R/H	Yes
— on S7-400H	Yes
● PROFINET system redundancy (R1)	No
● 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
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

last modified: 11/18/2022