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SIMATIC ET 200MP. PROFINET IO-DEVICE INTERFACEMODULE IM 155-5 PN ST FOR ET 200MP ELEKTRONIKMODULES; UP TO 12 IO-MODULES WITHOUT ADDITIONAL PS; UP TO 30 IO-MODULES WITH ADDITIONONAL PS SHARED DEVICE; MRP; IRT >=0.25MS; ISOCHRONICITY FW-UPDATE; I&M0...3; FSU WITH 500MS

General information	
Product type designation	IM 155-5 PN ST
HW functional status	FS01
Firmware version	V4.1.0
Vendor identification (VendorID)	0x002A
Device identifier (DeviceID)	0X0312
Product function	
• I&M data	Yes; I&M0 to I&M3
Engineering with	
• STEP 7 TIA Portal configurable/integrated as of version	V14 or higher with HSP 0223 / integrated with V15 or higher
• STEP 7 configurable/integrated as of version	GSDML V2.32
• PROFINET as of GSD version/GSD revision	V2.3 / -

Configuration control	
via user data	No
via dataset	Yes

Supply voltage	
Rated value (DC)	24 V

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permissible range, lower limit (DC)	20.4 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

Input current	
Current consumption (rated value)	0.2 A
Current consumption, max.	1.2 A
Inrush current, max.	9 A
I^2t	0.09 $A^2 \cdot s$

Power	
Infeed power to the backplane bus	14 W
Power available from the backplane bus	2.3 W

Power loss	
Power loss, typ.	4.5 W

Address area	
Address space per module	
• Address space per module, max.	256 byte; per input / output
Address space per station	
• Address space per station, max.	512 byte; per input / output

Hardware configuration	
Integrated power supply	Yes
System power supply can be plugged in to left of IM	Yes
Number of permissible power segments	3
Rack	
• Modules per rack, max.	30; I/O modules

Interfaces	
Number of PROFINET interfaces	1

1. Interface	
Interface types	
• Number of ports	2
• integrated switch	Yes
• RJ 45 (Ethernet)	Yes
Protocols	
• PROFINET IO Device	Yes
• Media redundancy	Yes; PROFINET MRP

Interface types
RJ 45 (Ethernet)

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• Transmission procedure	PROFINET with 100 Mbit/s full duplex (100BASE-TX)
• 100 Mbps	Yes
• Autonegotiation	Yes
• Autocrossing	Yes

Protocols	
PROFINET IO Device	
Services	
— Isochronous mode	Yes
— Open IE communication	Yes
— IRT	Yes
— PROFIenergy	No
— Prioritized startup	Yes
— Shared device	Yes
— Number of IO Controllers with shared device, max.	2
Redundancy mode	
• MRP	Yes
• MRPD	No
• PROFINET system redundancy (S2)	No
• Redundant PROFINET configuration (R1)	No
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

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
• Connection display LINK TX/RX	Yes; 2x green-yellow LEDs

Potential separation	
between backplane bus and electronics	No

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between PROFINET and all other circuits	Yes
between supply and all other circuits	No

Isolation	
Isolation tested with	707 V DC (type test)

Ambient conditions	
Ambient temperature during operation	
• horizontal installation, min.	0 °C
• horizontal installation, max.	60 °C
• vertical installation, min.	0 °C
• vertical installation, max.	40 °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	No

Dimensions	
Width	35 mm
Height	147 mm
Depth	129 mm

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