SIEMENS

Data sheet   **6ES7155-5AA00-0AA0**

SIMATIC ET 200MP PROFINET IO device Interface module IM 155-5 PN BA for ET 200MP electronic modules; up to 12 IO modules; Integrated 2-port switch; RJ45 Shared Device with 2 IO controllers, MRP; FW update; I&M0...3

General information	
Product type designation	IM 155-5 PN BA
HW functional status	From FS02
Firmware version	V4.3.0
Vendor identification (VendorID)	0x002A
Device identifier (DeviceID)	0X0312
Product function	
● I&M data	Yes; I&M0 to I&M3
● Module swapping during operation (hot swapping)	No
● Isochronous mode	No
Engineering with	
● STEP 7 TIA Portal configurable/integrated from version	V15.1 with HSP 187
● STEP 7 configurable/integrated from version	V5.5 SP3 / -
● PROFINET from GSD version/GSD revision	V2.3 / -

Configuration control	
via user data	No
via dataset	No

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	5 ms

Input current	
Current consumption (rated value)	1 A
Current consumption, max.	1.7 A
Inrush current, max.	2.8 A
I²t	0.04 A²·s

Power	
Infeed power to the backplane bus	14 W

Power loss	
Power loss, typ.	3 W

Address area	
Address space per module	
● Address space per module, max.	64 byte; per input / output
Address space per station	

● Address space per station, max.	64 byte; per input / output

Hardware configuration

Integrated power supply	Yes
System power supply can be plugged in to left of IM	No
Number of permissible power segments	1

Rack

● Modules per rack, max.	12; I/O modules

Submodules

● Number of submodules per station, max.	108; 9 submodules / I/O modules

Interfaces

Number of PROFINET interfaces	1; 2 ports (switch) RJ45

1. Interface

Interface types

● RJ 45 (Ethernet)	Yes
● Number of ports	2
● integrated switch	Yes
● BusAdapter (PROFINET)	No

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)
● 100 Mbps	Yes
● Autonegotiation	Yes
● Autocrossing	Yes

Protocols

PROFINET IO Device

Services

— IRT	No
— PROFIenergy	No
— Prioritized startup	No
— Shared device	Yes
— Number of IO Controllers with shared device, max.	2

Redundancy mode

● PROFINET system redundancy (S2)	No

Media redundancy

— MRP	Yes
— MRPD	No

Open IE communication

● TCP/IP	Yes
● SNMP	Yes
● LLDP	Yes

Isochronous mode

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

Potential separation

between backplane bus and electronics	No
between PROFINET and all other circuits	Yes; 1 500 V AC

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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	2
Ambient conditions	
Ambient temperature during operation	
● horizontal installation, min.	-30 °C; From FS03
● horizontal installation, max.	60 °C
● vertical installation, min.	-30 °C; From FS03
● 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
Dimensions	
Width	35 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	236 g

last modified: 4/26/2021 ⧉