

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	V3.0.0
Vendor identification (VendorID)	0x002A
Device identifier (DeviceID)	0X0312
Product function	
<ul style="list-style-type: none"> <li>I&amp;M data</li> </ul>	Yes; I&M0 to I&M3
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated as of version</li> </ul>	V13 / V13
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated as of version</li> </ul>	V5.5 SP3 / -
<ul style="list-style-type: none"> <li>PROFINET as of GSD version/GSD revision</li> </ul>	V2.3 / -
Configuration control	
via user data	No
via dataset	Yes
Supply voltage	
Type of supply voltage	DC

Rated value (DC)	24 V
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 5 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 <sup>2</sup> ·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
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#### 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
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#### 1. Interface

Interface types	
• Number of ports	2
• integrated switch	Yes
• RJ 45 (Ethernet)	Yes

#### Functionality

- PROFINET IO Device Yes
- Media redundancy Yes; PROFINET MRP

#### 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

— Isochronous mode	Yes
— IRT	Yes
— MRP	Yes
— MRPD	No
— PROFINET system redundancy	No
— PROFINergy	No
— Prioritized startup	Yes
— Shared device	Yes
— Number of IO Controllers with shared device, max.	2

#### 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 $\mu$ s
max. cycle	4 ms

### Interrupts/diagnostics/status information

Status indicator	Yes
Alarms	Yes
Diagnostic functions	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; yellow LED

### 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)
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## 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 |

## Connection method

### ET-Connection

- |                  |    |
|------------------|----|
| • via BU/BA Send | No |
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## Dimensions

Width	35 mm
Height	147 mm
Depth	129 mm

## Weights

Weight, approx.	310 g
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**last modified:** 12/22/2016