



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	
<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>	V14 or higher with HSP 0223 / integrated with V15 or higher
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated as of version</li> </ul>	GSDML V2.32
<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	
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
<b>Mains buffering</b>	
• Mains/voltage failure stored energy time	10 ms

<b>Input current</b>	
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

<b>Power</b>	
Infeed power to the backplane bus	14 W
Power available from the backplane bus	2.3 W

<b>Power loss</b>	
Power loss, typ.	4.5 W

<b>Address area</b>	
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

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

<b>Interfaces</b>	
Number of PROFINET interfaces	1

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

<b>Interface types</b>	
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
— PROFINergy	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

#### 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
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; 2x green-yellow LEDs

## 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)

## 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

## Dimensions

Width 35 mm

Height 147 mm

Depth 129 mm

**last modified:** 10/09/2018