

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"> I&M data | Yes; I&M0 to I&M3 |
| Engineering with | |
| <ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated as of version | V13 / V13 |
| <ul style="list-style-type: none"> STEP 7 configurable/integrated as of version | V5.5 SP3 / - |
| <ul style="list-style-type: none"> PROFINET as of GSD version/GSD revision | 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 ² ·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 |

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 μ 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)

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

Weights

Weight, approx. 310 g

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