

SIMATIC ET 200SP, PROFINET INTERFACE MODULE ET 200SP
 IM155-6PN HIGH FEATURE MAX. 64 PERIPHERY MODULES, 0.25
 MS ISOCHRONOUS MODE MULTI HOT SWAP, INCL.
 SERVERMODUL



| General information | |
|---|-----------------------------------|
| Product type designation | IM 155-6 PN HF with server module |
| Firmware version | V3.3 |
| Product function | |
| <ul style="list-style-type: none"> I&M data | Yes; I&M0 to I&M4 |
| Engineering with | |
| <ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated as of version | V13 SP1 Update 6 |
| <ul style="list-style-type: none"> STEP 7 configurable/integrated as of version | V5.5 SP4 and higher |
| <ul style="list-style-type: none"> PROFINET as of GSD version/GSD revision | - / V2.3 |
| Configuration control | |
| via dataset | Yes |
| 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 |
| Mains buffering | |

| | |
|--|--|
| • Mains/voltage failure stored energy time | 5 ms |
| Input current | |
| Current consumption, max. | 700 mA |
| Inrush current, max. | 4.5 A |
| I ² t | 0.09 A ² -s |
| Power loss | |
| Power loss, typ. | 2.4 W |
| Address area | |
| Address space per module | |
| • Address space per module, max. | 288 byte; For input and output data respectively |
| Address space per station | |
| • Address space per station, max. | 1 440 byte; Dependent on configuration |
| Hardware configuration | |
| Rack | |
| • Modules per rack, max. | 64; + 16 ET 200AL modules |
| Submodules | |
| • Number of submodules per station, max. | 256 |
| Interfaces | |
| Number of PROFINET interfaces | 1; 2 ports (switch) |
| 1. Interface | |
| Interface types | |
| • Number of ports | 2 |
| • integrated switch | Yes |
| • BusAdapter (PROFINET) | Yes; Compatible BusAdapter: BA 2x RJ45, BA 2x FC, BA 2x SCRJ (from FS03, V2.2), BA SCRJ / RJ45 (from FS03, V3.1), BA SCRJ / FC (from FS03, V3.1), BA 2x LC (from FS03, V3.3), BA LC / RJ45 (from FS03, V3.3), BA LC / FC (from FS03, V3.3) |
| Functionality | |
| • PROFINET IO Device | Yes |
| • Open IE communication | Yes |
| • Media redundancy | Yes; PROFINET MRP |
| Interface types | |
| RJ 45 (Ethernet) | |
| • Transmission procedure | PROFINET with 100 Mbit/s full duplex (100BASE-TX) |
| • 10 Mbps | No |
| • 100 Mbps | Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX) |
| • Autonegotiation | Yes |
| • Autocrossing | Yes |
| Protocols | |

| PROFINET IO Device | |
|---|---|
| Services | |
| — Isochronous mode | Yes; Bus cycle time: min. 250 μ s |
| — Open IE communication | Yes |
| — IRT | Yes; 250 μ s, 500 μ s, 1 ms, 2 ms, 4 ms additionally with IRT with high performance: 250 μ s to 4 ms in 125 μ s frame |
| — MRP | Yes |
| — MRPD | No |
| — PROFINET system redundancy | Yes; NAP S2 |
| — PROFINergy | Yes |
| — Prioritized startup | Yes |
| — Shared device | Yes |
| — Number of IO Controllers with shared device, max. | 4 |
| 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 |
| Bus cycle time (TDP), min. | 250 μ s |
| Jitter, max. | 1 μ s |
| 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 |
| • Monitoring of the supply voltage (PWR-LED) | Yes; green PWR LED |
| • Connection display LINK TX/RX | Yes; 2x green link LEDs on BusAdapter |
| Potential separation | |
| between backplane bus and electronics | No |
| between PROFINET and all other circuits | Yes |
| between supply and all other circuits | Yes |
| Isolation | |

| | |
|-----------------------|---|
| Isolation tested with | 707 V DC between supply voltage and electronics (type test); 1 500 V AC between Ethernet and electronics (type test) |
|-----------------------|---|

Standards, approvals, certificates

| | |
|-----------------------|---|
| Network loading class | 3 |
| Security level | According to Security Level 1 Test Cases V1.1.1 |

Ambient conditions

| | |
|--------------------------------------|-------|
| Ambient temperature during operation | |
| • horizontal installation, min. | 0 °C |
| • horizontal installation, max. | 60 °C |
| • vertical installation, min. | 0 °C |
| • vertical installation, max. | 50 °C |

Connection method

| | |
|------------------|----------------------------|
| ET-Connection | |
| • via BU/BA Send | Yes; + 16 ET 200AL modules |

Dimensions

| | |
|--------|--------|
| Width | 50 mm |
| Height | 117 mm |
| Depth | 74 mm |

Weights

| | |
|-----------------------|---------------------------|
| Weight, approx. | 147 g; without BusAdapter |
| last modified: | 12/01/2016 |