




*** Spare part *** SIMATIC ET 200SP, PROFINET interface module IM 155-6PN High Feature max. 64 I/O modules, 0.25 ms isochronous mode Multi-hotswap, incl. server module

| General information | |
|--|--|
| Product type designation | IM 155-6 PN HF |
| Firmware version | V3.3 |
| Product function | |
| <ul style="list-style-type: none"> I&M data | Yes; I&M0 to I&M4 |
| <ul style="list-style-type: none"> Module swapping during operation (hot swapping) | Yes; Multi-hot swapping |
| <ul style="list-style-type: none"> Isochronous mode | Yes |
| Engineering with | |
| <ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated from version | V13 SP1 Update 6 |
| <ul style="list-style-type: none"> STEP 7 configurable/integrated from version | V5.5 SP4 and higher |
| <ul style="list-style-type: none"> PROFINET from 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 | |
| <ul style="list-style-type: none"> Mains/voltage failure stored energy time | 5 ms |
| Input current | |
| Current consumption, max. | 700 mA |
| Inrush current, max. | 4.5 A |
| I^2t | 0.09 A ² ·s |
| Power loss | |
| Power loss, typ. | 2.4 W |
| Address area | |
| Address space per module | <ul style="list-style-type: none"> Address space per module, max. |
| | 288 byte; For input and output data respectively |
| Address space per station | <ul style="list-style-type: none"> Address space per station, max. |
| | 1 440 byte; Dependent on configuration |
| Hardware configuration | |
| Rack | <ul style="list-style-type: none"> Modules per rack, max. |
| | 64; + 16 ET 200AL modules |
| Submodules | <ul style="list-style-type: none"> Number of submodules per station, max. |
| | 256 |
| Interfaces | |
| Number of PROFINET interfaces | 1; 2 ports (switch) |

| 1. Interface | |
|--|--|
| Interface types | |
| <ul style="list-style-type: none"> Number of ports integrated switch BusAdapter (PROFINET) | 2 Yes 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) |
| Protocols | |
| <ul style="list-style-type: none"> PROFINET IO Device Open IE communication Media redundancy | Yes Yes Yes; PROFINET MRP |
| Interface types | |
| RJ 45 (Ethernet) | |
| <ul style="list-style-type: none"> Transmission procedure 10 Mbps 100 Mbps Autonegotiation Autocrossing | PROFINET with 100 Mbit/s full duplex (100BASE-TX) No Yes; PROFINET with 100 Mbit/s full duplex (100BASE-TX) Yes Yes |
| Protocols | |
| PROFINET IO Device | |
| Services | |
| — 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 |
| — PROFIenergy | Yes |
| — Prioritized startup | Yes |
| — Shared device | Yes |
| — Number of IO Controllers with shared device, max. | 4 |
| Redundancy mode | |
| • PROFINET system redundancy (S2) | Yes; NAP S2 |
| Media redundancy | |
| — MRP | Yes |
| — MRPD | No |
| Open IE communication | |
| • TCP/IP | Yes |
| • SNMP | Yes |
| • LLDP | Yes |
| Isochronous mode | |
| 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 |
| Diagnostics function | 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 |
| 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 | |
| <ul style="list-style-type: none"> • horizontal installation, min. • horizontal installation, max. • vertical installation, min. • vertical installation, max. | <ul style="list-style-type: none"> 0 °C 60 °C 0 °C 50 °C |
| connection method / header | |
| ET-Connection | |
| <ul style="list-style-type: none"> • 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: | 5/25/2021  |