



SIMATIC ET 200SP, bundle PROFINET interface module IM 155-6 PN ST, max. 32 I/O modules, and 16 ET 200AL modules, multi hot swap, optional PN strain relief, PN security class 1, bundle consists of: interface module (6ES7155-6AA02-0BN0), server module (6ES7193-6PA00-0AA0), SIMATIC bus adapter BA 2x RJ45 (6ES7193-6AR00-0AA0)

| General information | |
|--|---|
| Product type designation | IM 155-6 PN ST incl. BA 2x RJ45 and server module |
| Firmware version | V6.1 |
| <ul style="list-style-type: none"> FW update possible | Yes |
| Vendor identification (VendorID) | 002AH |
| Device identifier (DeviceID) | 0313H |
| Manufacturer ID according to ODVA (VendorID) | 04E3H |
| Device ID according to ODVA (Product code) | 0FA2H |
| 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 | No |
| Engineering with | |
| <ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated from version | V18 |
| <ul style="list-style-type: none"> STEP 7 configurable/integrated from version | V5.7 SP2 HF1 |
| <ul style="list-style-type: none"> PROFINET from GSD version/GSD revision | GSDML V2.43 |
| 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 |
| Short-circuit protection | Yes |
| Mains buffering | |
| <ul style="list-style-type: none"> Mains/voltage failure stored energy time | 10 ms |
| Input current | |
| Current consumption (rated value) | 350 mA |
| Current consumption, max. | 450 mA |
| Inrush current, max. | 1 A |
| I^2t | 0.05 A ² ·s |
| Power loss | |
| Power loss, typ. | 1.8 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 |
| Hardware configuration | |
| Rack | |

| | |
|---|---|
| • Quantity of operable ET 200SP modules, max. | 32 |
| • Quantity of operable ET 200AL modules, max. | 16 |
| Submodules | |
| • Number of submodules per station, max. | 256 |
| Interfaces | |
| Number of PROFINET interfaces | 1; 2 ports (switch) |
| 1. Interface | |
| Interface types | |
| • RJ 45 (Ethernet) | Yes; with BusAdapter |
| • Number of ports | 2; with BusAdapter |
| • integrated switch | Yes |
| • BusAdapter (PROFINET) | Yes; BA 2x RJ45, BA 2x FC, BA 2x M12 |
| Protocols | |
| • PROFINET IO Device | Yes |
| • Open IE communication | Yes |
| • Media redundancy | Yes; PROFINET MRP client |
| PROFINET IO Device | |
| Services | |
| — IRT | Yes |
| — PROFIenergy | Yes |
| — Prioritized startup | Yes |
| — Shared device | Yes |
| — Number of IO Controllers with shared device, max. | 4 |
| Interface types | |
| RJ 45 (Ethernet) | |
| • Transmission procedure | PROFINET with 100 Mbit/s full duplex (100BASE-TX) |
| • 100 Mbps | Yes |
| • Autonegotiation | Yes |
| • Autocrossing | Yes |
| Protocols | |
| Modbus TCP | No |
| Redundancy mode | |
| • PROFINET system redundancy (S2) | No |
| Media redundancy | |
| — MRP | Yes |
| — MRPD | No |
| Open IE communication | |
| • TCP/IP | Yes |
| • SNMP | Yes |
| • LLDP | Yes |
| 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 |
| • 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; 1500 V AC (type test) |
| between supply and all other circuits | No |
| Permissible potential difference | |
| between different circuits | Safety extra low voltage SELV |
| Isolation | |
| Isolation tested with | 707 V DC (type test) |
| Standards, approvals, certificates | |
| Network loading class | 3 |

| product functions / security / header | |
|---|--|
| PROFINET Security Class | 1 |
| signed firmware update | Yes |
| safely removing data | Yes |
| data integrity | Yes |
| Ambient conditions | |
| Ambient temperature during operation | |
| <ul style="list-style-type: none"> horizontal installation, min. | -30 °C; No condensation |
| <ul style="list-style-type: none"> horizontal installation, max. | 60 °C |
| <ul style="list-style-type: none"> vertical installation, min. | -30 °C; No condensation |
| <ul style="list-style-type: none"> vertical installation, max. | 50 °C |
| Altitude during operation relating to sea level | |
| <ul style="list-style-type: none"> Installation altitude above sea level, max. | 5 000 m; restrictions for installation altitudes > 2 000 m, see ET 200SP system manual |
| connection method | |
| ET-Connection | |
| <ul style="list-style-type: none"> via BU/BA Send | Yes; + 16 ET 200AL modules |
| Mechanics/material | |
| Strain relief | Yes; Optional |
| Dimensions | |
| Width | 50 mm |
| Height | 117 mm |
| Depth | 74 mm |
| Weights | |
| Weight, approx. | 120 g; without BusAdapter |

last modified: 8/5/2024 