



SIMATIC ET 200MP, multi-fieldbus, interface module IM 155-5 MF HF, IM 155-5 MF HF, EtherNet/IP and Modbus TCP, 2 flexible ports via plug-in SIMATIC BusAdapter (sold separately), max. 30 I/O modules, multi-hot-swap with active backplane (sold separately), IRT with 250 µs, shared device with 4 controllers (1440 bytes each), 256 bytes per I/O module, MRP, MRPD, S2 redundancy, PN security class 1, optional cable grip (sold separately) PN security class 1, optional cable grip (sold separately)

| General information | |
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| Product type designation | IM 155-5 MF HF |
| HW functional status | From FS01 |
| Firmware version | V5.0 |
| • FW update possible | Yes |
| Vendor identification (VendorID) | 002AH |
| Device identifier (DeviceID) | 0312H |
| Product function | |
| • I&M data | Yes; I&M0 to I&M3 |
| • Module swapping during operation (hot swapping) | Yes; In combination with active backplane bus |
| • Isochronous mode | No |
| • Tool changer | No |
| • Local coupling, IO data | No |
| Engineering with | |
| • STEP 7 TIA Portal configurable/integrated from version | V19 |
| • STEP 7 configurable/integrated from version | use GSD file |
| • 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 | |
| • Mains/voltage failure stored energy time | 10 ms |
| Input current | |
| Current consumption (rated value) | 0.16 A; at 24 V DC and without load |
| Current consumption, max. | 1.2 A |
| Inrush current, max. | 13 A |
| I ² t | 0.1 A ² ·s |
| Power | |
| Infeed power to the backplane bus | 16 W |
| Power available from the backplane bus | 3.4 W; in case of operation with separate system power supply to the left of IM |
| Power loss | |
| Power loss, typ. | 4.3 W |
| Address area | |
| Address space per module | |
| • Address space per module, max. | 256 byte; For input and output data respectively |

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| Address space per station | |
| • Address space per station, max. | 1 440 byte; For input and output data respectively |
| Hardware configuration | |
| Integrated power supply | Yes; 16 W |
| System power supply can be plugged in to left of IM | Yes; only with design with U-connectors |
| Number of permissible power segments | 3; incl. interface module |
| Rack | |
| • Modules per rack, max. | 30; I/O modules |
| Submodules | |
| • Number of submodules per station, max. | 256; 9 per I/O module |
| 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 / HRP client |
| PROFINET IO Device | |
| Services | |
| — IRT | Yes; 250 µs to 4 ms in 125 µs frame |
| — PROFIenergy | No |
| — Prioritized startup | No |
| — 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) | Yes; NAP S2 |
| — on S7-1500R/H | Yes |
| — on S7-400H | Yes; use GSD file |
| • PROFINET system redundancy (R1) | No |
| • H-Sync forwarding | Yes |
| Media redundancy | |
| — MRP | Yes |
| — MRPD | Yes |
| Open IE communication | |
| • TCP/IP | Yes |
| • UDP | Yes |
| • SNMP | Yes |
| • LLDP | Yes |
| • ARP | Yes |
| • IGMP | Yes |
| • Multicast | Yes |
| • Broadcast | Yes |
| • IPv4 | Yes |
| Isochronous mode | |
| Equidistance | No |
| Interrupts/diagnostics/status information | |
| Status indicator | Yes |

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| Alarms | Yes |
| Diagnostics function | 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 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 |
| Secure Boot | Yes |
| safely removing data | Yes |
| data integrity | Yes |
| Ambient conditions | |
| Ambient temperature during operation | |
| • horizontal installation, min. | -30 °C |
| • horizontal installation, max. | 60 °C |
| • vertical installation, min. | -30 °C |
| • vertical installation, max. | 40 °C |
| Altitude during operation relating to sea level | |
| • Installation altitude above sea level, max. | 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual |
| connection method | |
| ET-Connection | |
| • via BU/BA Send | No |
| Mechanics/material | |
| Strain relief | Yes; Optional |
| Dimensions | |
| Width | 35 mm |
| Height | 147 mm |
| Depth | 129 mm |
| Weights | |
| Weight, approx. | 260 g; without BusAdapter |

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