



SIMATIC ET 200SP, PROFINET interface module IM 155-6PN Basic, Max. 12 I/O modules, 2x integrated RJ45 sockets incl. server module

| General information                                      |                                                 |
|----------------------------------------------------------|-------------------------------------------------|
| Product type designation                                 | IM 155-6 PN BA                                  |
| HW functional status                                     | from FS04                                       |
| Firmware version                                         |                                                 |
| • FW update possible                                     | Yes                                             |
| Product function                                         |                                                 |
| • I&M data                                               | Yes; I&M0 to I&M3                               |
| • Module swapping during operation (hot swapping)        | Yes; Single hot swapping                        |
| • Isochronous mode                                       | No                                              |
| Engineering with                                         |                                                 |
| • STEP 7 TIA Portal configurable/integrated from version | V13 SP1                                         |
| • STEP 7 configurable/integrated from version            | V5.5 SP4                                        |
| • PROFINET from GSD version/GSD revision                 | GSDML V2.31                                     |
| 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               | 5 ms                                            |
| Input current                                            |                                                 |
| Current consumption, max.                                | 300 mA                                          |
| I <sup>2</sup> t                                         | 0.09 A <sup>2</sup> ·s                          |
| Power loss                                               |                                                 |
| Power loss, typ.                                         | 1.8 W                                           |
| Address area                                             |                                                 |
| Address space per module                                 |                                                 |
| • Address space per module, max.                         | 32 byte; For input and output data respectively |
| Address space per station                                |                                                 |
| • Address space per station, max.                        | 32 byte                                         |
| Hardware configuration                                   |                                                 |
| Rack                                                     |                                                 |
| • Quantity of operable ET 200SP modules, max.            | 12                                              |
| • Quantity of operable ET 200AL modules, max.            | 0                                               |
| Interfaces                                               |                                                 |
| Number of PROFINET interfaces                            | 1; 2 ports (switch)                             |
| 1. Interface                                             |                                                 |

|                                                  |                                                   |
|--------------------------------------------------|---------------------------------------------------|
| <b>Interface types</b>                           |                                                   |
| • RJ 45 (Ethernet)                               | Yes; 2 integrated RJ45 ports                      |
| • Number of ports                                | 2; integrated RJ45 ports                          |
| • integrated switch                              | Yes                                               |
| • BusAdapter (PROFINET)                          | No                                                |
| <b>Protocols</b>                                 |                                                   |
| • PROFINET IO Device                             | Yes                                               |
| • Open IE communication                          | Yes                                               |
| • Media redundancy                               | Yes; PROFINET MRP client                          |
| <b>PROFINET IO Device</b>                        |                                                   |
| <b>Services</b>                                  |                                                   |
| — IRT                                            | No                                                |
| — PROFIenergy                                    | No                                                |
| — Prioritized startup                            | No                                                |
| — Shared device                                  | No                                                |
| <b>Interface types</b>                           |                                                   |
| <b>RJ 45 (Ethernet)</b>                          |                                                   |
| • Transmission procedure                         | PROFINET with 100 Mbit/s full duplex (100BASE-TX) |
| • 100 Mbps                                       | Yes                                               |
| • Autonegotiation                                | Yes                                               |
| • Autocrossing                                   | Yes                                               |
| <b>Protocols</b>                                 |                                                   |
| Supports protocol for PROFINET IO                | Yes                                               |
| PROFIsafe                                        | No                                                |
| PROFIBUS                                         | No                                                |
| EtherNet/IP                                      | No                                                |
| Modbus TCP                                       | No                                                |
| <b>Redundancy mode</b>                           |                                                   |
| • PROFINET system redundancy (S2)                | No                                                |
| <b>Media redundancy</b>                          |                                                   |
| — MRP                                            | Yes                                               |
| — MRPD                                           | No                                                |
| <b>Open IE communication</b>                     |                                                   |
| • TCP/IP                                         | Yes                                               |
| • SNMP                                           | Yes                                               |
| • LLDP                                           | Yes                                               |
| <b>Interrupts/diagnostics/status information</b> |                                                   |
| Status indicator                                 | Yes                                               |
| Alarms                                           | Yes                                               |
| Diagnostics function                             | Yes                                               |
| <b>Diagnostics indication LED</b>                |                                                   |
| • 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             |
| <b>Potential separation</b>                      |                                                   |
| 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                                                |
| <b>Permissible potential difference</b>          |                                                   |
| between different circuits                       | Safety extra low voltage SELV                     |
| <b>Isolation</b>                                 |                                                   |
| Isolation tested with                            | 707 V DC (type test)                              |
| <b>Standards, approvals, certificates</b>        |                                                   |
| Network loading class                            | 2                                                 |
| <b>Ambient conditions</b>                        |                                                   |
| <b>Ambient temperature during operation</b>      |                                                   |
| • horizontal installation, min.                  | -30 °C; No condensation                           |
| • horizontal installation, max.                  | 60 °C                                             |

|                                                 |                                                                        |
|-------------------------------------------------|------------------------------------------------------------------------|
| • vertical installation, min.                   | -30 °C; No condensation                                                |
| • vertical installation, max.                   | 50 °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 |
| <b>connection method</b>                        |                                                                        |
| ET-Connection                                   |                                                                        |
| • via BU/BA Send                                | No                                                                     |
| <b>Dimensions</b>                               |                                                                        |
| Width                                           | 35 mm                                                                  |
| Height                                          | 117 mm                                                                 |
| Depth                                           | 74 mm                                                                  |
| <b>Weights</b>                                  |                                                                        |
| Weight, approx.                                 | 125 g                                                                  |
| <b>Classifications</b>                          |                                                                        |

|        | Version | Classification |
|--------|---------|----------------|
| eClass | 14      | 27-24-26-08    |
| eClass | 12      | 27-24-26-08    |
| eClass | 9.1     | 27-24-26-08    |
| eClass | 9       | 27-24-26-08    |
| eClass | 8       | 27-24-26-08    |
| eClass | 7.1     | 27-24-26-08    |
| eClass | 6       | 27-24-26-08    |
| ETIM   | 9       | EC001604       |
| ETIM   | 8       | EC001604       |
| ETIM   | 7       | EC001604       |
| IDEA   | 4       | 3564           |
| UNSPSC | 15      | 32-15-17-05    |

#### Approvals / Certificates

##### General Product Approval



EG-Konf.



[Miscellaneous](#)

[Manufacturer Declaration](#)



UL

[KC](#)

##### General Product Approval

##### For use in hazardous locations



RCM



UL

[FM](#)

[CCC-Ex](#)



ATEX



IECEX

##### For use in hazardous locations

##### Maritime application

[Miscellaneous](#)



ABS



BUREAU  
VERITAS



DNV



LRS

[NK / Nippon Kaiji Kyokai](#)

##### Maritime application

##### Industrial Communication



RINA



RMRS

[CCS \(China Classification Society\)](#)



KR  
KOREAN REGISTER

[PROFINET](#)

