


\*\*\* Spare part \*\*\* SIMATIC ET 200SP, PROFINET interface module IM 155-6PN standard, max. 32 I/O modules, incl. server module

| General information                                      |  |
|--|--|
| Product type designation                                 | IM 155-6 PN ST   |
| Firmware version   | V3.3   |
| 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 and higher  |
| • 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  |  |
| • Mains/voltage failure stored energy time               | 5 ms   |
| Input current  |  |
| Current consumption, max.                                | 450 mA   |
| Inrush current, max.                                     | 3.7 A  |
| I <sup>2</sup> t   | 0.09 A <sup>2</sup> ·s   |
| Power loss   |  |
| Power loss, typ.   | 1.9 W  |
| Address area   |  |
| Address space per module                                 |  |
| • Address space per module, max.                         | 256 byte; per input / output   |
| Address space per station                                |  |
| • Address space per station, max.                        | 512 byte; Dependent on configuration                                     |
| Hardware configuration                                   |  |
| Rack   |  |
| • Modules per rack, max.                                 | 32; + 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; Applicable BusAdapter: BA 2x RJ45, BA 2x FC                         |
| Protocols  |  |
| • PROFINET IO Device                                     | Yes  |
| • Open IE communication                                  | Yes  |
| • Media redundancy                                       | Yes; PROFINET MRP  |
| PROFINET IO Device                                       |  |
| Services   |  |
| — IRT  | Yes; with send cycles of between 250 µs and 4 ms in increments of 125 µs |

|   |  |
|---|--|
| — PROFinergy  | Yes  |
| — Prioritized startup                               | Yes  |
| — Shared device                                     | Yes  |
| — Number of IO Controllers with shared device, max. | 2  |
| <b>Interface types</b>                              |  |
| 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  |
| <b>Protocols</b>                                    |  |
| Redundancy mode                                     |  |
| • PROFINET system redundancy (S2)                   | No   |
| Media redundancy                                    |  |
| — MRP   | Yes  |
| — MRPD  | No   |
| Open IE communication                               |  |
| • TCP/IP  | Yes  |
| • SNMP  | Yes  |
| • LLDP  | Yes  |
| <b>Isochronous mode</b>                             |  |
| Equidistance  | No   |
| <b>Interrupts/diagnostics/status information</b>    |  |
| 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  |
| <b>Potential separation</b>                         |  |
| between backplane bus and electronics               | No   |
| between PROFINET and all other circuits             | Yes  |
| between supply and all other circuits               | Yes  |
| <b>Isolation</b>                                    |  |
| Isolation tested with                               | 707 V DC between supply voltage and electronics; 1 500 V AC between Ethernet and electronics   |
| <b>Standards, approvals, certificates</b>           |  |
| Network loading class                               | 2  |
| <b>Ambient conditions</b>                           |  |
| Ambient temperature during operation                |  |
| • horizontal installation, min.                     | 0 °C   |
| • horizontal installation, max.                     | 60 °C  |
| • vertical installation, min.                       | 0 °C   |
| • vertical installation, max.                       | 50 °C  |
| <b>connection method</b>                            |  |
| ET-Connection                                       |  |
| • via BU/BA Send                                    | Yes; + 16 ET 200AL modules   |
| <b>Dimensions</b>                                   |  |
| Width   | 50 mm  |
| Height  | 117 mm   |
| Depth   | 74 mm  |
| <b>Weights</b>                                      |  |
| Weight, approx.                                     | 147 g; without BusAdapter  |
| last modified:                                      | 10/12/2023  |