



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                                                                                                                                                                                         |                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Interface types                                                                                                                                                                                      |                                                                                                                  |
| <ul style="list-style-type: none"> <li>• RJ 45 (Ethernet)</li> <li>• Number of ports</li> <li>• integrated switch</li> <li>• BusAdapter (PROFINET)</li> </ul>                                        | Yes; 2 integrated RJ45 ports<br>2; integrated RJ45 ports<br>Yes<br>No                                            |
| Protocols                                                                                                                                                                                            |                                                                                                                  |
| <ul style="list-style-type: none"> <li>• PROFINET IO Device</li> <li>• Open IE communication</li> <li>• Media redundancy</li> </ul>                                                                  | Yes<br>Yes<br>Yes; PROFINET MRP client                                                                           |
| PROFINET IO Device                                                                                                                                                                                   |                                                                                                                  |
| Services                                                                                                                                                                                             |                                                                                                                  |
| <ul style="list-style-type: none"> <li>— IRT</li> <li>— PROFIenergy</li> <li>— Prioritized startup</li> <li>— Shared device</li> </ul>                                                               | No<br>No<br>No<br>No                                                                                             |
| Interface types                                                                                                                                                                                      |                                                                                                                  |
| RJ 45 (Ethernet)                                                                                                                                                                                     |                                                                                                                  |
| <ul style="list-style-type: none"> <li>• Transmission procedure</li> <li>• 100 Mbps</li> <li>• Autonegotiation</li> <li>• Autocrossing</li> </ul>                                                    | PROFINET with 100 Mbit/s full duplex (100BASE-TX)<br>Yes<br>Yes<br>Yes                                           |
| Protocols                                                                                                                                                                                            |                                                                                                                  |
| Supports protocol for PROFINET IO                                                                                                                                                                    | Yes                                                                                                              |
| PROFIsafe                                                                                                                                                                                            | No                                                                                                               |
| PROFIBUS                                                                                                                                                                                             | No                                                                                                               |
| EtherNet/IP                                                                                                                                                                                          | No                                                                                                               |
| Modbus TCP                                                                                                                                                                                           | No                                                                                                               |
| Redundancy mode                                                                                                                                                                                      |                                                                                                                  |
| <ul style="list-style-type: none"> <li>• PROFINET system redundancy (S2)</li> </ul>                                                                                                                  | No                                                                                                               |
| Media redundancy                                                                                                                                                                                     |                                                                                                                  |
| <ul style="list-style-type: none"> <li>— MRP</li> <li>— MRPD</li> </ul>                                                                                                                              | Yes<br>No                                                                                                        |
| Open IE communication                                                                                                                                                                                |                                                                                                                  |
| <ul style="list-style-type: none"> <li>• TCP/IP</li> <li>• SNMP</li> <li>• LLDP</li> </ul>                                                                                                           | Yes<br>Yes<br>Yes                                                                                                |
| Interrupts/diagnostics/status information                                                                                                                                                            |                                                                                                                  |
| Status indicator                                                                                                                                                                                     | Yes                                                                                                              |
| Alarms                                                                                                                                                                                               | Yes                                                                                                              |
| Diagnostics function                                                                                                                                                                                 | Yes                                                                                                              |
| Diagnostics indication LED                                                                                                                                                                           |                                                                                                                  |
| <ul style="list-style-type: none"> <li>• RUN LED</li> <li>• ERROR LED</li> <li>• MAINT LED</li> <li>• Monitoring of the supply voltage (PWR-LED)</li> <li>• Connection display LINK TX/RX</li> </ul> | Yes; green LED<br>Yes; red LED<br>Yes; Yellow LED<br>Yes; green PWR LED<br>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                                                                                                                                                                                | 2                                                                                                                |
| Ambient conditions                                                                                                                                                                                   |                                                                                                                  |

|                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Ambient temperature during operation                                                |                                                                                     |                                                                                     |                                                                                       |
| • 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              |                                                                                       |
| Connection method                                                                   |                                                                                     |                                                                                     |                                                                                       |
| ET-Connection                                                                       |                                                                                     |                                                                                     |                                                                                       |
| • via BU/BA Send                                                                    |                                                                                     | No                                                                                  |                                                                                       |
| Dimensions                                                                          |                                                                                     |                                                                                     |                                                                                       |
| Width                                                                               |                                                                                     | 35 mm                                                                               |                                                                                       |
| Height                                                                              |                                                                                     | 117 mm                                                                              |                                                                                       |
| Depth                                                                               |                                                                                     | 74 mm                                                                               |                                                                                       |
| Weights                                                                             |                                                                                     |                                                                                     |                                                                                       |
| Weight, approx.                                                                     |                                                                                     | 125 g                                                                               |                                                                                       |
| Classifications                                                                     |                                                                                     |                                                                                     |                                                                                       |
|                                                                                     |                                                                                     | 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                                                                                | 10                                                                                  | EC001604                                                                              |
|                                                                                     | ETIM                                                                                | 9                                                                                   | EC001604                                                                              |
|                                                                                     | ETIM                                                                                | 8                                                                                   | EC001604                                                                              |
|                                                                                     | ETIM                                                                                | 7                                                                                   | EC001604                                                                              |
|                                                                                     | IDEA                                                                                | 4                                                                                   | 3564                                                                                  |
|                                                                                     | UNSPSC                                                                              | 15                                                                                  | 32-15-17-05                                                                           |
| Approvals / Certificates                                                            |                                                                                     |                                                                                     |                                                                                       |
| General Product Approval                                                            |                                                                                     |                                                                                     |                                                                                       |
|  |  | <a href="#">Miscellaneous</a>                                                       | <a href="#">Manufacturer Declaration</a>                                              |
|                                                                                     |                                                                                     |                                                                                     | <a href="#">China RoHS</a>                                                            |
|                                                                                     |                                                                                     |                                                                                     |  |
| General Product Approval                                                            |                                                                                     | For use in hazardous locations                                                      |                                                                                       |
|  |  |  |  |
|                                                                                     |                                                                                     | <a href="#">FM</a>                                                                  | <a href="#">CCC-Ex</a>                                                                |
| For use in hazardous locations                                                      |                                                                                     | Maritime application                                                                |                                                                                       |
|  | <a href="#">Miscellaneous</a>                                                       | <a href="#">Type Examination Certificate</a>                                        |    |
|                                                                                     |                                                                                     |                                                                                     |  |
|                                                                                     |                                                                                     |                                                                                     |  |
| Maritime application                                                                |                                                                                     |                                                                                     |                                                                                       |



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