



SIMATIC HMI TP1200 Comfort INOX Stainless steel front, Continuous decorative film, Degree of protection front IP66K, 12" widescreen TFT display, PROFINET interface, MPI/PROFIBUS DP interface, 12 MB configuration memory, Windows CE 6.0, (Microsoft Support included Security updates discontinued) configurable from WinCC Comfort V11

| General information                                                   |                        |
|-----------------------------------------------------------------------|------------------------|
| Product type designation                                              | TP1200 Comfort INOX    |
| Display                                                               |                        |
| Design of display                                                     | TFT                    |
| Screen diagonal                                                       | 12.1 in                |
| Display width                                                         | 261.1 mm               |
| Display height                                                        | 163.2 mm               |
| Number of colors                                                      | 16 777 216             |
| Resolution (pixels)                                                   |                        |
| • Horizontal image resolution                                         | 1 280 pixel            |
| • Vertical image resolution                                           | 800 pixel              |
| Backlighting                                                          |                        |
| • MTBF backlighting (at 25 °C)                                        | 80 000 h               |
| • Backlight dimmable                                                  | Yes; 0-100 %           |
| Control elements                                                      |                        |
| Keyboard fonts                                                        |                        |
| • Function keys                                                       |                        |
| — Number of function keys                                             | 0                      |
| — Number of function keys with LEDs                                   | 0                      |
| • Keys with LED                                                       | No                     |
| • System keys                                                         | No                     |
| • Numeric keyboard                                                    | Yes; Onscreen keyboard |
| • alphanumeric keyboard                                               | Yes; Onscreen keyboard |
| Touch operation                                                       |                        |
| • Design as touch screen                                              | Yes                    |
| Expansions for operator control of the process                        |                        |
| • DP direct LEDs (LEDs as S7 output I/O)                              |                        |
| — F1...Fx                                                             | 0                      |
| • Direct keys (keys as S7 input I/O)                                  |                        |
| — F1...Fx                                                             | 0                      |
| • Direct keys (touch buttons as S7 input I/O)                         | 40                     |
| Installation type/mounting                                            |                        |
| Mounting position                                                     | vertical               |
| Mounting in portrait format possible                                  | Yes                    |
| Mounting in landscape format possible                                 | Yes                    |
| maximum permissible angle of inclination without external ventilation | 35°                    |
| Supply voltage                                                        |                        |
| Type of supply voltage                                                | DC                     |


|                                            |                                         |
|--------------------------------------------|-----------------------------------------|
| Rated value (DC)                           | 24 V                                    |
| permissible range, lower limit (DC)        | 19.2 V                                  |
| permissible range, upper limit (DC)        | 28.8 V                                  |
| <b>Input current</b>                       |                                         |
| Current consumption (rated value)          | 0.85 A                                  |
| Starting current inrush I <sub>st</sub>    | 0.5 A <sup>2</sup> ·s                   |
| <b>Power</b>                               |                                         |
| Active power input, typ.                   | 20 W                                    |
| <b>Processor</b>                           |                                         |
| Processor type                             | X86                                     |
| <b>Memory</b>                              |                                         |
| Flash                                      | Yes                                     |
| RAM                                        | Yes                                     |
| Memory available for user data             | 12 Mbyte                                |
| <b>Type of output</b>                      |                                         |
| Info LED                                   | No                                      |
| Power LED                                  | No                                      |
| Error LED                                  | No                                      |
| Acoustics                                  |                                         |
| • Buzzer                                   | No                                      |
| • Speaker                                  | Yes                                     |
| <b>Time of day</b>                         |                                         |
| Clock                                      |                                         |
| • Hardware clock (real-time)               | Yes                                     |
| • Software clock                           | Yes                                     |
| • retentive                                | Yes; Back-up duration typically 6 weeks |
| • synchronizable                           | Yes                                     |
| <b>Interfaces</b>                          |                                         |
| Number of industrial Ethernet interfaces   | 1; 2 ports (switch)                     |
| Number of RS 485 interfaces                | 1; RS 422 / 485 combined                |
| Number of RS 422 interfaces                | 0; together with RS 485                 |
| Number of RS 232 interfaces                | 0                                       |
| Number of USB interfaces                   | 2; USB 2.0                              |
| • USB Mini B                               | 1; 5-pole                               |
| Number of 20 mA interfaces (TTY)           | 0                                       |
| Number of parallel interfaces              | 0                                       |
| Number of other interfaces                 | 0                                       |
| Number of SD card slots                    | 2                                       |
| With software interfaces                   | No                                      |
| <b>Industrial Ethernet</b>                 |                                         |
| • Industrial Ethernet status LED           | 2                                       |
| • Number of ports of the integrated switch | 2                                       |
| <b>Protocols</b>                           |                                         |
| PROFINET                                   | Yes                                     |
| Supports protocol for PROFINET IO          | Yes                                     |
| IRT                                        | Yes; As of WinCC V12                    |
| PROFIBUS                                   | Yes                                     |
| EtherNet/IP                                | Yes                                     |
| MPI                                        | Yes                                     |
| <b>Protocols (Ethernet)</b>                |                                         |
| • TCP/IP                                   | Yes                                     |
| • DHCP                                     | Yes                                     |
| • SNMP                                     | Yes                                     |
| • DCP                                      | Yes                                     |
| • LLDP                                     | Yes                                     |
| <b>WEB characteristics</b>                 |                                         |
| • HTTP                                     | Yes                                     |
| • HTTPS                                    | Yes                                     |
| • HTML                                     | Yes                                     |

|                                                    |                      |
|----------------------------------------------------|----------------------|
| • XML                                              | Yes                  |
| • CSS                                              | Yes                  |
| • Active X                                         | Yes                  |
| • JavaScript                                       | Yes                  |
| • Java VM                                          | No                   |
| Redundancy mode                                    |                      |
| Media redundancy                                   |                      |
| — MRP                                              | Yes; As of WinCC V12 |
| Further protocols                                  |                      |
| • CAN                                              | No                   |
| • MODBUS                                           | Yes                  |
| <b>EMC</b>                                         |                      |
| Emission of radio interference acc. to EN 55 011   |                      |
| • Limit class A, for use in industrial areas       | Yes                  |
| • Limit class B, for use in residential areas      | No                   |
| <b>Degree and class of protection</b>              |                      |
| IP (at the front)                                  | IP66K                |
| IP (rear)                                          | IP20                 |
| NEMA (front)                                       |                      |
| • Enclosure Type 4 at the front                    | No                   |
| • Enclosure Type 4x at the front                   | Yes; indoor use only |
| <b>Standards, approvals, certificates</b>          |                      |
| CE mark                                            | Yes                  |
| cULus                                              | Yes                  |
| FM approval                                        | Yes                  |
| RCM (formerly C-TICK)                              | Yes                  |
| KC approval                                        | Yes                  |
| EAC (formerly Gost-R)                              | Yes                  |
| Use in hazardous areas                             |                      |
| • ATEX Zone 2                                      | Yes                  |
| • ATEX Zone 22                                     | Yes                  |
| • IECEx Zone 2                                     | Yes                  |
| • IECEx Zone 22                                    | Yes                  |
| • cULus Class I Zone 1                             | No                   |
| • cULus Class I Zone 2, Division 2                 | Yes                  |
| • FM Class I Division 2                            | Yes                  |
| Marine approval                                    |                      |
| • Germanischer Lloyd (GL)                          | No                   |
| • American Bureau of Shipping (ABS)                | No                   |
| • Bureau Veritas (BV)                              | No                   |
| • Det Norske Veritas (DNV)                         | No                   |
| • Korean Register of Shipping (KRS)                | No                   |
| • Lloyds Register of Shipping (LRS)                | No                   |
| • Nippon Kaiji Kyokai (Class NK)                   | No                   |
| • Polski Rejestr Statkow (PRS)                     | No                   |
| <b>Ambient conditions</b>                          |                      |
| Ambient temperature during operation               |                      |
| Operation (vertical installation)                  |                      |
| — For vertical installation, min.                  | 0 °C                 |
| — For vertical installation, max.                  | 50 °C                |
| Operation (max. tilt angle)                        |                      |
| — At maximum tilt angle, min.                      | 0 °C                 |
| — At maximum tilt angle, max.                      | 40 °C                |
| Operation (vertical installation, portrait format) |                      |
| — For vertical installation, min.                  | 0 °C                 |
| — For vertical installation, max.                  | 40 °C                |
| Operation (max. tilt angle, portrait format)       |                      |
| — At maximum tilt angle, min.                      | 0 °C                 |
| — At maximum tilt angle, max.                      | 35 °C                |

|                                                              |                       |
|--------------------------------------------------------------|-----------------------|
| Ambient temperature during storage/transportation            |                       |
| • min.                                                       | -20 °C                |
| • max.                                                       | 60 °C                 |
| Relative humidity                                            |                       |
| • Operation, max.                                            | 80 %; no condensation |
| Operating systems                                            |                       |
| proprietary                                                  | No                    |
| pre-installed operating system                               |                       |
| • Windows CE                                                 | Yes                   |
| configuration / header                                       |                       |
| Message indicator                                            | Yes                   |
| Alarm system (incl. buffer and acknowledgment)               | Yes                   |
| Process value display (output)                               | Yes                   |
| Process value default (input) possible                       | Yes                   |
| Recipe management                                            | Yes                   |
| Configuration software                                       |                       |
| • STEP 7 Basic (TIA Portal)                                  | No                    |
| • STEP 7 Professional (TIA Portal)                           | No                    |
| • WinCC flexible Compact                                     | No                    |
| • WinCC flexible Standard                                    | No                    |
| • WinCC flexible Advanced                                    | No                    |
| • WinCC Basic (TIA Portal)                                   | No                    |
| • WinCC Comfort (TIA Portal)                                 | Yes; from V11         |
| • WinCC Advanced (TIA Portal)                                | Yes; from V11         |
| • WinCC Professional (TIA Portal)                            | Yes; from V11         |
| Languages                                                    |                       |
| Online languages                                             |                       |
| • Number of online/runtime languages                         | 32                    |
| Project languages                                            |                       |
| • Languages per project                                      | 32                    |
| Functionality under WinCC (TIA Portal)                       |                       |
| Libraries                                                    | Yes                   |
| Applications/options                                         |                       |
| • Web browser                                                | Yes                   |
| • Pocket Word                                                | Yes                   |
| • Pocket Excel                                               | Yes                   |
| • PDF Viewer                                                 | Yes                   |
| • Media Player                                               | Yes                   |
| • SIMATIC WinCC Sm@rtServer                                  | Yes                   |
| • SIMATIC WinCC Audit                                        | Yes                   |
| Number of Visual Basic Scripts                               | Yes                   |
| Task planner                                                 |                       |
| • time-controlled                                            | Yes                   |
| • task-controlled                                            | Yes                   |
| Help system                                                  |                       |
| • Number of characters per info text                         | 70                    |
| Message system                                               |                       |
| • Number of alarm classes                                    | 32                    |
| • Bit messages                                               |                       |
| — Number of bit messages                                     | 4 000                 |
| • Analog messages                                            |                       |
| — Number of analog messages                                  | 200                   |
| • S7 alarm number procedure                                  | Yes                   |
| • System messages HMI                                        | Yes                   |
| • System event, more (SIMATIC S7, SINUMERIK, SIMOTION, ... ) | Yes                   |
| • Number of characters per message                           | 80                    |
| • Number of process values per message                       | 8                     |
| • Acknowledgment groups                                      | Yes                   |
| • Message indicator                                          | Yes                   |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Message buffer <ul style="list-style-type: none"> <li>— Number of entries</li> <li>— Circulating buffer</li> <li>— retentive</li> <li>— maintenance-free</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                         | 1 024<br>Yes<br>Yes<br>Yes                                                                                                       |
| Recipe management                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                  |
| <ul style="list-style-type: none"> <li>• Number of recipes</li> <li>• Data records per recipe</li> <li>• Entries per data record</li> <li>• Size of internal recipe memory</li> <li>• Recipe memory expandable</li> </ul>                                                                                                                                                                                                                                                                                        | 300<br>500<br>1 000<br>2 Mbyte<br>Yes                                                                                            |
| Variables                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                  |
| <ul style="list-style-type: none"> <li>• Number of variables per device</li> <li>• Number of variables per screen</li> <li>• Limit values</li> <li>• Multiplexing</li> <li>• Structures</li> <li>• Arrays</li> </ul>                                                                                                                                                                                                                                                                                             | 2 048<br>400<br>Yes<br>Yes<br>Yes<br>Yes                                                                                         |
| Images                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                  |
| <ul style="list-style-type: none"> <li>• Number of configurable images</li> <li>• Permanent window/default</li> <li>• Global image</li> <li>• Pop-up images</li> <li>• Slide-in images</li> <li>• Image selection by PLC</li> <li>• Image number in the PLC</li> </ul>                                                                                                                                                                                                                                           | 500<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes                                                                                    |
| Image objects                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                  |
| <ul style="list-style-type: none"> <li>• Number of objects per image</li> <li>• Text fields</li> <li>• I/O fields</li> <li>• Graphic I/O fields (graphics list)</li> <li>• Symbolic I/O fields (text list)</li> <li>• Date/time fields</li> <li>• Switches</li> <li>• Buttons</li> <li>• Graphic display</li> <li>• Icons</li> <li>• Geometric objects</li> </ul>                                                                                                                                                | 400<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes                                                 |
| Complex image objects                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                  |
| <ul style="list-style-type: none"> <li>• Number of complex objects per screen</li> <li>• Alarm view</li> <li>• Trend view</li> <li>• User view</li> <li>• Status/control</li> <li>• Sm@rtClient view</li> <li>• Recipe view</li> <li>• f(x) trend view</li> <li>• System diagnostics view</li> <li>• Media Player</li> <li>• HTML browser</li> <li>• PDF display</li> <li>• IP camera display</li> <li>• Bar graphs</li> <li>• Sliders</li> <li>• Pointer instruments</li> <li>• Analog/digital clock</li> </ul> | 20<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes<br>Yes |
| Lists                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                  |
| <ul style="list-style-type: none"> <li>• Number of text lists per project</li> <li>• Number of entries per text list</li> <li>• Number of graphics lists per project</li> </ul>                                                                                                                                                                                                                                                                                                                                  | 500<br>500<br>500                                                                                                                |

|                                         |                                    |
|-----------------------------------------|------------------------------------|
| • Number of entries per graphics list   | 500                                |
| <b>Archiving</b>                        |                                    |
| • Number of archives per device         | 50                                 |
| • Number of entries per archive         | 20 000                             |
| • Message archive                       | Yes                                |
| • Process value archive                 | Yes                                |
| • Archiving methods                     |                                    |
| — Sequential archive                    | Yes                                |
| — Short-term archive                    | Yes                                |
| • Memory location                       |                                    |
| — Memory card                           | Yes                                |
| — USB memory                            | Yes                                |
| — Ethernet                              | Yes                                |
| • Data storage format                   |                                    |
| — CSV                                   | Yes                                |
| — TXT                                   | Yes                                |
| — RDB                                   | Yes                                |
| <b>Security</b>                         |                                    |
| • Number of user groups                 | 50                                 |
| • Number of user rights                 | 32                                 |
| • Number of users                       | 50                                 |
| • Password export/import                | Yes                                |
| • SIMATIC Logon                         | Yes                                |
| <b>Logging through printer</b>          |                                    |
| • Alarms                                | Yes                                |
| • Report (shift log)                    | Yes                                |
| • Hardcopy                              | Yes                                |
| • Electronic print to file              | Yes; PDF, HTML                     |
| <b>Character sets</b>                   |                                    |
| • Keyboard fonts                        |                                    |
| — US English                            | Yes                                |
| <b>Transfer (upload/download)</b>       |                                    |
| • MPI/PROFIBUS DP                       | Yes                                |
| • USB                                   | Yes                                |
| • Ethernet                              | Yes                                |
| • using external storage medium         | Yes                                |
| <b>Process coupling</b>                 |                                    |
| • S7-1200                               | Yes                                |
| • S7-1500                               | Yes                                |
| • S7-200                                | Yes                                |
| • S7-300/400                            | Yes                                |
| • LOGO!                                 | Yes                                |
| • WinAC                                 | Yes                                |
| • SINUMERIK                             | Yes; with SINUMERIK option package |
| • SIMOTION                              | Yes                                |
| • Allen Bradley (EtherNet/IP)           | Yes                                |
| • Allen Bradley (DF1)                   | Yes                                |
| • Mitsubishi (MC TCP/IP)                | Yes                                |
| • Mitsubishi (FX)                       | Yes                                |
| • OMRON (FINS TCP)                      | No                                 |
| • OMRON (LINK/Multilink)                | Yes                                |
| • Modicon (Modbus TCP/IP)               | Yes                                |
| • Modicon (Modbus)                      | Yes                                |
| • OPC UA Client                         | Yes                                |
| • OPC UA Server                         | Yes                                |
| <b>Service tools/configuration aids</b> |                                    |
| • Backup/Restore manually               | Yes                                |
| • Backup/Restore automatically          | Yes                                |
| • Simulation                            | Yes                                |
| • Device switchover                     | Yes                                |

| Peripherals/Options                                    |                                                                                            |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Printer                                                | Yes                                                                                        |
| SIMATIC HMI MM memory card: Multi Media Card           | Yes; Up to 128 MB                                                                          |
| SIMATIC HMI SD memory card: Secure Digital memory card | Yes; Up to 2 GB                                                                            |
| SIMATIC HMI CF memory card Compact Flash Card          | No                                                                                         |
| USB memory                                             | Yes                                                                                        |
| SIMATIC IPC USB Flashdrive (USB stick)                 | Yes; Up to 16 GB                                                                           |
| SIMATIC HMI USB stick                                  | Yes; Up to 8 GB                                                                            |
| Network camera                                         | Yes                                                                                        |
| Mechanics/material                                     |                                                                                            |
| Enclosure material (front)                             |                                                                                            |
| • Plastic                                              | No                                                                                         |
| • Aluminum                                             | No                                                                                         |
| • Stainless steel                                      | Yes                                                                                        |
| Dimensions                                             |                                                                                            |
| Width of the housing front                             | 330 mm                                                                                     |
| Height of housing front                                | 241 mm                                                                                     |
| Mounting cutout, width                                 | 310 mm                                                                                     |
| Mounting cutout, height                                | 221 mm                                                                                     |
| Overall depth                                          | 67 mm                                                                                      |
| Weights                                                |                                                                                            |
| Weight (without packaging)                             | 3.6 kg                                                                                     |
| Weight (with packaging)                                | 4.2 kg                                                                                     |
| <b>last modified:</b>                                  | 3/2/2021  |