

SIMATIC HMI MTP1500, Unified Comfort Panel, touch operation, 15.6" widescreen TFT display, 16 million colors, PROFINET interface, configurable from WinCC Unified Comfort V16, contains open-source software, which is provided free of charge See enclosed Blu-Ray



Figure similar

| General information            |                         |
|--------------------------------|-------------------------|
| Product type designation       | MTP1500 Unified Comfort |
| Display                        |                         |
| Design of display              | TFT                     |
| Screen diagonal                | 15.6 in                 |
| Display width                  | 344.2 mm                |
| Display height                 | 197 mm                  |
| Number of colors               | 16 777 216              |
| Resolution (pixels)            |                         |
| • Horizontal image resolution  | 1 366 Pixel             |
| • Vertical image resolution    | 768 Pixel               |
| Backlighting                   |                         |
| • MTBF backlighting (at 25 °C) | 50 000 h                |
| • Backlight dimmable           | Yes; 10 ... 100%        |
| Control elements               |                         |
| Keyboard fonts                 |                         |

|                                                                       |                                         |
|-----------------------------------------------------------------------|-----------------------------------------|
| • Numeric keyboard                                                    | Yes; Onscreen keyboard                  |
| • alphanumeric keyboard                                               | Yes; Onscreen keyboard                  |
| Touch operation                                                       |                                         |
| • Design as touch screen                                              | Yes                                     |
| • Design as multi-touch screen                                        | Yes                                     |
| 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                                  |
| Input current                                                         |                                         |
| Current consumption (rated value)                                     | 0.7 A                                   |
| Current consumption, max.                                             | 1.3 A                                   |
| Starting current inrush I <sub>st</sub>                               | 0.5 A <sup>2</sup> ·s                   |
| Memory                                                                |                                         |
| Flash                                                                 | Yes                                     |
| RAM                                                                   | Yes                                     |
| Type of output                                                        |                                         |
| Acoustics                                                             |                                         |
| • Buzzer                                                              | Yes                                     |
| • Speaker                                                             | No                                      |
| Time of day                                                           |                                         |
| Clock                                                                 |                                         |
| • Hardware clock (real-time)                                          | Yes                                     |
| • Software clock                                                      | Yes                                     |
| • retentive                                                           | Yes; Back-up duration typically 6 weeks |
| • synchronizable                                                      | Yes                                     |
| Interfaces                                                            |                                         |
| Number of industrial Ethernet interfaces                              | 2; 2 ports (switch) + independent port  |
| 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                                              | 4; USB 3.0                              |
| Number of other interfaces                                            | 0                                       |

|                                                         |                    |
|---------------------------------------------------------|--------------------|
| Number of SD card slots                                 | 2                  |
| <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                       | No                 |
| PROFIBUS                                                | No                 |
| <b>Protocols (Ethernet)</b>                             |                    |
| • TCP/IP                                                | Yes                |
| • DHCP                                                  | Yes                |
| • SNMP                                                  | Yes                |
| • DCP                                                   | Yes                |
| • LLDP                                                  | Yes                |
| <b>Redundancy mode</b>                                  |                    |
| <b>Media redundancy</b>                                 |                    |
| — MRP                                                   | Yes                |
| <b>EMC</b>                                              |                    |
| <b>Emission of radio interference acc. to EN 55 011</b> |                    |
| • 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)                                       | IP65               |
| IP (rear)                                               | IP20               |
| NEMA (front)                                            |                    |
| • Enclosure Type 4x at the front                        | Yes                |
| • Enclosure Type 12 at the front                        | Yes                |
| <b>Standards, approvals, certificates</b>               |                    |
| CE mark                                                 | Yes                |
| cULus                                                   | Yes                |
| RCM (formerly C-TICK)                                   | Yes                |
| KC approval                                             | No; Available soon |
| EAC (formerly Gost-R)                                   | Yes                |
| <b>Use in hazardous areas</b>                           |                    |
| • ATEX Zone 2                                           | No; Available soon |
| • ATEX Zone 22                                          | No; Available soon |
| • IECEx Zone 2                                          | No; Available soon |
| • IECEx Zone 22                                         | No; Available soon |
| • cULus Class I Zone 2, Division 2                      | No; Available soon |
| • cULus Class II Division 2                             | No                 |
| • FM Class I Division 2                                 | No; Available soon |

|                                                          |                       |
|----------------------------------------------------------|-----------------------|
| • FM Class II Division 2                                 | No                    |
| <b>Marine approval</b>                                   |                       |
| • Germanischer Lloyd (GL)                                | No; Available soon    |
| • American Bureau of Shipping (ABS)                      | No; Available soon    |
| • Bureau Veritas (BV)                                    | No; Available soon    |
| • Det Norske Veritas (DNV)                               | No; Available soon    |
| • Lloyds Register of Shipping (LRS)                      | No; Available soon    |
| • Nippon Kaiji Kyokai (Class NK)                         | No; Available soon    |
| • Chinese Classification Society (CCS)                   | No; Available soon    |
| <b>Ambient conditions</b>                                |                       |
| Suited for indoor use                                    | Yes                   |
| Suited for outdoor use                                   | No                    |
| <b>Ambient temperature during operation</b>              |                       |
| • 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, min.                            | 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, min.                            | 35 °C                 |
| <b>Ambient temperature during storage/transportation</b> |                       |
| • min.                                                   | -20 °C                |
| • max.                                                   | 60 °C                 |
| <b>Relative humidity</b>                                 |                       |
| • Operation, max.                                        | 90 %; no condensation |
| <b>Operating systems</b>                                 |                       |
| proprietary                                              | Yes                   |
| <b>Configuration</b>                                     |                       |
| Message indicator                                        | Yes                   |
| Alarm system (incl. buffer and acknowledgment)           | Yes                   |
| Recipe management                                        | Yes                   |
| <b>Configuration software</b>                            |                       |
| • WinCC Unified Comfort Engineering (TIA Portal)         | Yes                   |
| • WinCC Unified PC Engineering (TIA Portal)              | Yes                   |

|                                                                  |                                  |
|------------------------------------------------------------------|----------------------------------|
| <b>Languages</b>                                                 |                                  |
| <b>Online languages</b>                                          |                                  |
| • Number of online/runtime languages                             | 32                               |
| <b>Project languages</b>                                         |                                  |
| • Languages per project                                          | 32                               |
| <b>Functionality under WinCC Unified</b>                         |                                  |
| Libraries                                                        | Yes                              |
| Applications/options                                             |                                  |
| • Writer                                                         | Yes                              |
| • Web browser                                                    | Yes                              |
| • Media Player                                                   | Yes                              |
| • SIMATIC WinCC Sm@rtServer                                      | Yes                              |
| • SIMATIC WinCC Audit                                            | No                               |
| • Unified Collaboration                                          | No                               |
| JavaScript                                                       | Yes                              |
| Task planner                                                     |                                  |
| • time-controlled                                                | Yes                              |
| • task-controlled                                                | Yes                              |
| Help system                                                      |                                  |
| • Number of characters per info text                             | 70                               |
| • Number of message texts per message                            | 10                               |
| <b>Message system</b>                                            |                                  |
| • Number of alarm classes                                        | 32                               |
| • Bit messages                                                   |                                  |
| — Number of bit messages                                         | 9 000                            |
| • Analog messages                                                |                                  |
| — Number of analog messages                                      | 300                              |
| • S7 alarm number procedure                                      | Yes                              |
| • System messages HMI                                            | Yes                              |
| • System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.) | Yes                              |
| • Number of characters per message                               | 512                              |
| • Number of process values per message                           | 10                               |
| • Acknowledgment groups                                          | Yes                              |
| • Message indicator                                              | No                               |
| • Message buffer                                                 | Yes; Configured as alarm archive |
| — Circulating buffer                                             | Yes                              |
| — retentive                                                      | Yes                              |
| — maintenance-free                                               | Yes                              |
| <b>Parameter set management (recipes)</b>                        |                                  |
| • Number of parameter set types                                  | 750                              |

|                                         |          |
|-----------------------------------------|----------|
| • Parameter sets per parameter set type | 2 000    |
| • Entries per parameter set             | 1 000    |
| • Size of internal parameter set memory | 12 Mbyte |
| • Parameter set memory expandable       | Yes      |
| <b>Variables</b>                        |          |
| • Number of variables per device        | 8 000    |
| • Number of variables per screen        | 800      |
| • Limit values                          | Yes      |
| • Structures                            | Yes      |
| • Arrays                                | Yes      |
| <b>Images</b>                           |          |
| • Number of configurable images         | 1 200    |
| • Faceplate                             | Yes      |
| <b>Image objects</b>                    |          |
| • Number of objects per image           | 1 200    |
| • Picture window                        | Yes      |
| • Text fields                           | Yes      |
| • I/O fields                            | Yes      |
| • Graphic I/O fields (graphics list)    | Yes      |
| • Symbolic I/O fields (text list)       | Yes      |
| • Scalable Vector Graphics (SVG)        | Yes      |
| • Date/time fields                      | Yes      |
| • Checkbox                              | Yes      |
| • Option button                         | Yes      |
| • Switches                              | Yes      |
| • Buttons                               | Yes      |
| • Graphic display                       | Yes      |
| • Icons                                 | Yes      |
| • Custom web display                    | Yes      |
| • Geometric objects                     | Yes      |
| <b>Complex image objects</b>            |          |
| • Number of complex objects per screen  | 80       |
| • Alarm view                            | Yes      |
| • Trend view                            | Yes      |
| • User view                             | Yes      |
| • Status/control                        | No       |
| • Parameter set display                 | Yes      |
| • HTML browser                          | Yes      |
| • Bar graphs                            | Yes      |
| • Sliders                               | Yes      |
| • Pointer instruments                   | Yes      |

|                                         |         |
|-----------------------------------------|---------|
| • Analog/digital clock                  | Yes     |
| <b>Lists</b>                            |         |
| • Number of text lists per project      | 750     |
| • Number of entries per text list       | 750     |
| • Number of graphics lists per project  | 750     |
| • Number of entries per graphics list   | 750     |
| <b>Archiving</b>                        |         |
| • Number of archives per device         | 50      |
| • Number of entries per archive         | 500 000 |
| • 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                              | No      |
| <b>Security</b>                         |         |
| • Number of roles                       | 50      |
| • Number of function rights             | 0; V16  |
| • Number of users                       | 200     |
| • Password export/import                | Yes     |
| • Central user administration           | No      |
| <b>Transfer (upload/download)</b>       |         |
| • USB                                   | No      |
| • Ethernet                              | Yes     |
| • using external storage medium         | No      |
| <b>Process coupling</b>                 |         |
| • S7-1200                               | Yes     |
| • S7-1500                               | Yes     |
| • S7-200                                | No      |
| • S7-300/400                            | Yes     |
| • Number of S7 connections              | 16      |
| • LOGO!                                 | No      |
| • SIMOTION                              | No      |
| • OPC UA Client                         | No      |
| • OPC UA Server                         | No      |
| • Software Controller/Open Controller   | No      |
| <b>Service tools/configuration aids</b> |         |
| • Backup/Restore manually               | Yes     |

- Backup/Restore automatically
- Simulation
- Device switchover

Yes  
Yes  
Yes

#### Peripherals/Options

|                                                        |                         |
|--------------------------------------------------------|-------------------------|
| Peripherals                                            | Printer, barcode reader |
| Printer                                                | Yes                     |
| SIMATIC HMI MM memory card: Multi Media Card           | No                      |
| SIMATIC HMI SD memory card: Secure Digital memory card | Yes                     |
| SIMATIC HMI CF memory card Compact Flash Card          | No                      |
| USB memory                                             | Yes                     |
| SIMATIC IPC USB Flashdrive (USB stick)                 | Yes                     |
| SIMATIC HMI USB stick                                  | Yes                     |
| Network camera                                         | No                      |

#### Mechanics/material

|                            |     |
|----------------------------|-----|
| Enclosure material (front) |     |
| • Aluminum                 | Yes |

#### Dimensions

|                            |        |
|----------------------------|--------|
| Width of the housing front | 398 mm |
| Height of housing front    | 257 mm |
| Mounting cutout, width     | 382 mm |
| Mounting cutout, height    | 241 mm |
| Overall depth              | 73 mm  |

#### Weights

|                          |        |
|--------------------------|--------|
| Weight without packaging | 4.3 kg |
|--------------------------|--------|

**last modified:**

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