

SIMATIC HMI KTP700F Mobile HW, 7.0" TFT display, 800 x 480 pixel, 16m colors key and touch operation, 6 function keys, 2 illuminated push-buttons, 1x PROFINET/Industrial Ethernet interface, 1x multimedia card, 1x USB, Key-operated switch, acknowledgement switch, emergency stop/stop button configurable from WinCC Comfort V15, handwheel



| General information                                       |                                          |
|-----------------------------------------------------------|------------------------------------------|
| Product type designation                                  | KTP700F                                  |
| Display                                                   |                                          |
| Design of display                                         | TFT widescreen display, LED backlighting |
| Screen diagonal                                           | 7 in                                     |
| Color display                                             | Yes                                      |
| Number of colors                                          | 16 777 216                               |
| Resolution (pixels)                                       |                                          |
| • Horizontal image resolution                             | 800 pixel                                |
| • Vertical image resolution                               | 480 pixel                                |
| Backlighting                                              |                                          |
| • MTBF backlighting (at 25 °C)                            | 50 000 h                                 |
| • Backlight dimmable                                      | Yes; 0-100 %                             |
| Control elements                                          |                                          |
| Keyboard fonts                                            |                                          |
| • Function keys                                           |                                          |
| — Number of function keys                                 | 6                                        |
| — Number of function keys with LEDs                       | 6                                        |
| • Keys with LED                                           | Yes                                      |
| • Numeric keyboard                                        | Yes; Onscreen keyboard                   |
| • alphanumeric keyboard                                   | Yes; Onscreen keyboard                   |
| Touch operation                                           |                                          |
| • Design as touch screen                                  | Yes                                      |
| • Design as multi-touch screen                            | No                                       |
| Special operator controls                                 |                                          |
| • Stop button (forced blocking)                           | Yes                                      |
| • Emergency stop button (illuminated and forced blocking) | Yes                                      |
| • Acknowledgement button (3-stage)                        | Yes                                      |
| • Key-operated switch                                     | Yes                                      |
| • Illuminated pushbutton                                  | Yes                                      |
| • Handwheel                                               | Yes                                      |
| Camera                                                    |                                          |
| • integrated camera                                       | No                                       |
| Expansions for operator control of the process            |                                          |
| • DP direct LEDs (LEDs as S7 output I/O)                  |                                          |
| — F1...Fx                                                 | 6                                        |
| • Direct keys (keys as S7 input I/O)                      |                                          |
| — F1...Fx                                                 | 6                                        |
| • Direct keys (touch buttons as S7 input I/O)             | 32                                       |
| 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>Memory</b>                            |            |
| Flash                                    | Yes        |
| RAM                                      | Yes        |
| Memory available for user data           | 12 Mbyte   |
| <b>Type of output</b>                    |            |
| Power LED                                | No         |
| LED for safe                             | No         |
| LED for communication                    | No         |
| LED for battery                          | No         |
| Vibrations                               | No         |
| <b>Time of day</b>                       |            |
| Clock                                    |            |
| • Hardware clock (real-time)             | Yes        |
| • retentive                              | Yes        |
| • synchronizable                         | Yes        |
| <b>Interfaces</b>                        |            |
| Number of industrial Ethernet interfaces | 1          |
| Number of PROFINET interfaces            | 1          |
| Number of RS 485 interfaces              | 0          |
| Number of RS 422 interfaces              | 0          |
| Number of RS 232 interfaces              | 0          |
| Number of USB interfaces                 | 1; USB 2.0 |
| Number of wireless interfaces            | 0          |
| Number of SD card slots                  | 1          |
| <b>Protocols</b>                         |            |
| PROFINET                                 | Yes        |
| Supports protocol for PROFINET IO        | Yes        |
| PROFIsafe                                | Yes        |
| PROFIBUS                                 | No         |
| EtherNet/IP                              | Yes        |
| MPI                                      | No         |
| Protocols (Ethernet)                     |            |
| • TCP/IP                                 | Yes        |
| • DHCP                                   | Yes        |
| • SNMP                                   | Yes        |
| • DCP                                    | Yes        |
| • LLDP                                   | Yes        |
| WEB characteristics                      |            |
| • HTTP                                   | Yes        |
| • HTTPS                                  | Yes        |
| • HTML                                   | Yes        |
| • XML                                    | No         |
| • CSS                                    | Yes        |
| • Active X                               | No         |
| • JavaScript                             | Yes        |
| • Java VM                                | No         |
| Further protocols                        |            |
| • MODBUS                                 | Yes        |
| • other bus systems                      | No         |
| <b>communication functions / header</b>  |            |
| Wireless communication                   |            |
| • supported standards                    |            |
| — Radio standard WLAN 802.11             | No         |
| — Bluetooth radio standard               | No         |
| <b>Degree and class of protection</b>    |            |
| IP65 (all-round)                         | Yes        |

|                                                          |        |
|----------------------------------------------------------|--------|
| <b>Standards, approvals, certificates</b>                |        |
| CE mark                                                  | Yes    |
| UL approval                                              | Yes    |
| cULus                                                    | Yes    |
| FM approval                                              | No     |
| RCM (formerly C-TICK)                                    | Yes    |
| KC approval                                              | No     |
| EAC (formerly Gost-R)                                    | Yes    |
| Suitable for safety functions                            | Yes    |
| Marine approval                                          | No     |
| <b>Highest safety class achievable in safety mode</b>    |        |
| • Performance level according to ISO 13849-1             | PLe    |
| • SIL acc. to IEC 61508                                  | SIL 3  |
| <b>Use in hazardous areas</b>                            |        |
| • ATEX Zone 2                                            | No     |
| • ATEX Zone 22                                           | No     |
| • IECEx Zone 2                                           | No     |
| • IECEx Zone 22                                          | No     |
| • cULus Class I Zone 1                                   | No     |
| • cULus Class I Zone 2, Division 2                       | No     |
| • cULus Class II Division 2                              | No     |
| • FM Class I Division 2                                  | No     |
| • FM Class II Division 2                                 | No     |
| <b>Marine approval</b>                                   |        |
| • Germanischer Lloyd (GL)                                | Yes    |
| • Polski Rejestr Statkow (PRS)                           | No     |
| <b>Ambient conditions</b>                                |        |
| <b>Free fall</b>                                         |        |
| • Fall height, max.                                      | 1.2 m  |
| <b>Ambient temperature during operation</b>              |        |
| • min.                                                   | 0 °C   |
| • max.                                                   | 45 °C  |
| <b>Ambient temperature during storage/transportation</b> |        |
| • min.                                                   | -20 °C |
| • max.                                                   | 60 °C  |
| <b>Relative humidity</b>                                 |        |
| • Operation, max.                                        | 90 %   |
| <b>Operating systems</b>                                 |        |
| <b>pre-installed operating system</b>                    |        |
| • Windows CE                                             | Yes    |
| <b>configuration / header</b>                            |        |
| Message indicator                                        | Yes    |
| Alarm system (incl. buffer and acknowledgment)           | Yes    |
| Process value display (output)                           | Yes    |
| Process value default (input) possible                   | Yes    |
| Recipe management                                        | Yes    |
| <b>Configuration software</b>                            |        |
| • 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    |
| • WinCC Advanced (TIA Portal)                            | Yes    |
| • WinCC Professional (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 (TIA Portal)</b>                |         |
| Libraries                                                    | Yes     |
| Applications/options                                         |         |
| • Web browser                                                | Yes     |
| • Pocket Word                                                | No      |
| • Pocket Excel                                               | No      |
| • PDF Viewer                                                 | Yes     |
| • Media Player                                               | No      |
| • 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                         | 500     |
| <b>Multiproject</b>                                          |         |
| • Number of projects (internal)                              | 0       |
| • Number of projects (external)                              | 0       |
| <b>Message system</b>                                        |         |
| • 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     |
| • Message buffer                                             |         |
| — Number of entries                                          | 1 024   |
| — Circulating buffer                                         | Yes     |
| — retentive                                                  | Yes     |
| — maintenance-free                                           | Yes     |
| <b>Recipe management</b>                                     |         |
| • Number of recipes                                          | 300     |
| • Data records per recipe                                    | 500     |
| • Entries per data record                                    | 1 000   |
| • Size of internal recipe memory                             | 2 Mbyte |
| • Recipe memory expandable                                   | Yes     |
| <b>Variables</b>                                             |         |
| • Number of variables per device                             | 2 048   |
| • Number of variables per screen                             | 400     |
| • Limit values                                               | Yes     |
| • Multiplexing                                               | Yes     |
| • Structures                                                 | Yes     |
| • Arrays                                                     | Yes     |
| <b>Images</b>                                                |         |
| • Number of configurable images                              | 500     |
| • Permanent window/default                                   | Yes     |
| • Global image                                               | Yes     |
| • Image selection by PLC                                     | Yes     |
| • Image number in the PLC                                    | Yes     |
| <b>Image objects</b>                                         |         |
| • Number of objects per image                                | 400     |
| • Text fields                                                | Yes     |

|                                        |                |
|----------------------------------------|----------------|
| • I/O fields                           | Yes            |
| • Graphic I/O fields (graphics list)   | Yes            |
| • Symbolic I/O fields (text list)      | Yes            |
| • Date/time fields                     | Yes            |
| • Switches                             | Yes            |
| • Graphic display                      | Yes            |
| • Icons                                | Yes            |
| • Geometric objects                    | Yes            |
| Complex image objects                  |                |
| • Number of complex objects per screen | 20             |
| • Alarm view                           | Yes            |
| • Trend view                           | Yes            |
| • User view                            | Yes            |
| • Status/control                       | Yes            |
| • Sm@rtClient view                     | Yes            |
| • Recipe view                          | Yes            |
| • f(x) trend view                      | Yes            |
| • System diagnostics view              | Yes            |
| • Media Player                         | Yes            |
| • Bar graphs                           | Yes            |
| • Sliders                              | Yes            |
| • Pointer instruments                  | Yes            |
| • Analog/digital clock                 | Yes            |
| Lists                                  |                |
| • Number of text lists per project     | 500            |
| • Number of entries per text list      | 500            |
| • Number of graphics lists per project | 500            |
| • Number of entries per graphics list  | 500            |
| Archiving                              |                |
| • 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                                  | No             |
| — RDB                                  | Yes            |
| Security                               |                |
| • Number of user groups                | 50             |
| • Number of user rights                | 32             |
| • Number of users                      | 50             |
| • Password export/import               | Yes            |
| • SIMATIC Logon                        | Yes            |
| Logging through printer                |                |
| • Alarms                               | Yes            |
| • Electronic print to file             | Yes; PDF, HTML |
| Character sets                         |                |
| • Keyboard fonts                       |                |
| — US English                           | Yes            |
| Transfer (upload/download)             |                |
| • MPI/PROFIBUS DP                      | No             |
| • USB                                  | No             |
| • Ethernet                             | Yes            |
| • Wireless LAN                         | No             |

|                                                        |                      |
|--------------------------------------------------------|----------------------|
| • using external storage medium                        | No                   |
| <b>Process coupling</b>                                |                      |
| • S7-1200                                              | Yes                  |
| • S7-1500                                              | Yes                  |
| • S7-200                                               | Yes                  |
| • S7-300/400                                           | Yes                  |
| • LOGO!                                                | Yes                  |
| • WinAC                                                | No                   |
| • SINUMERIK                                            | Yes                  |
| • SIMOTION                                             | Yes                  |
| • Allen Bradley (EtherNet/IP)                          | Yes                  |
| • Allen Bradley (DF1)                                  | No                   |
| • Mitsubishi (MC TCP/IP)                               | Yes                  |
| • Mitsubishi (FX)                                      | No                   |
| • OMRON (FINS TCP)                                     | Yes                  |
| • OMRON (LINK/Multilink)                               | No                   |
| • Modicon (Modbus TCP/IP)                              | Yes                  |
| • Modicon (Modbus)                                     | No                   |
| <b>Service tools/configuration aids</b>                |                      |
| • Backup/Restore manually                              | Yes                  |
| • Backup/Restore automatically                         | Yes                  |
| • Simulation                                           | Yes                  |
| • Device switchover                                    | Yes                  |
| <b>Peripherals/Options</b>                             |                      |
| Printer                                                | Yes                  |
| SIMATIC HMI MM memory card: Multi Media Card           | Yes                  |
| SIMATIC HMI SD memory card: Secure Digital memory card | Yes                  |
| USB memory                                             | Yes                  |
| Network camera                                         | Yes                  |
| Additional software components loadable                | Yes; SIMATIC options |
| <b>Mechanics/material</b>                              |                      |
| Enclosure material (front)                             |                      |
| • Plastic                                              | Yes                  |
| • Aluminum                                             | No                   |
| • Stainless steel                                      | No                   |
| <b>Dimensions</b>                                      |                      |
| Width of the housing front                             | 248.4 mm             |
| Height of housing front                                | 171.7 mm             |
| <b>Weights</b>                                         |                      |
| Weight (without packaging)                             | 1.3 kg               |
| Weight (with packaging)                                | 1.8 kg               |

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