# SIEMENS

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 | SIMATIC HMI KTP700F Mobile HW |
| **Display** | |
| Design of display | TFT widescreen display, LED backlighting |
| Screen diagonal | 7 in |
| Color display | Yes |
| Number of colors | 16 000 000 |
| 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 | |
| ● Direct keys (touch buttons as S7 input I/O) | 32 |
| **Supply voltage** | |
| Type of supply voltage | DC |

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| | |
|---|---|
| Rated value (DC) | 24 V |
| permissible range, lower limit (DC) | 19.2 V |
| permissible range, upper limit (DC) | 28.8 V |
| **Memory** | |
| Flash | Yes |
| RAM | Yes |
| Memory available for user data | 12 Mbyte |
| **Type of output** | |
| Power LED | No |
| LED for safe | No |
| LED for communication | No |
| LED for battery | No |
| Vibrations | No |
| **Time of day** | |
| Clock | |
| ● Hardware clock (real-time) | Yes |
| ● retentive | Yes |
| ● synchronizable | Yes |
| **Interfaces** | |
| 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 |
| **Protocols** | |
| PROFINET | Yes |
| Supports protocol for PROFINET IO | Yes |
| PROFIsafe | Yes |
| PROFIBUS | No |
| 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 | |
| ● EtherNet/IP | Yes |
| ● MODBUS | Yes |
| ● other bus systems | No |
| **Communication functions** | |
| Wireless communication | |
| ● supported standards | |
| — Radio standard WLAN 802.11 | No |
| — Bluetooth radio standard | No |

| Degree and class of protection | |
|---|---|
| IP65 (all-round) | Yes |

| Standards, approvals, certificates | |
|---|---|
| CE mark | Yes |
| UL approval | Yes |
| cULus | Yes |
| FM approval | No |
| KC approval | No |
| Suitable for safety functions | Yes |
| Marine approval | No |
| Highest safety class achievable in safety mode | |
| ● Performance level according to ISO 13849-1 | PLe |
| ● SIL acc. to IEC 61508 | SIL 3 |
| Use in hazardous areas | |
| ● 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 |
| Marine approval | |
| ● Germanischer Lloyd (GL) | Yes |
| ● Polski Rejestr Statkow (PRS) | No |

| Ambient conditions | |
|---|---|
| Free fall | |
| ● Fall height, max. | 1.2 m |
| Ambient temperature during operation | |
| ● min. | 0 °C |
| ● max. | 45 °C |
| Ambient temperature during storage/transportation | |
| ● min. | -20 °C |
| ● max. | 60 °C |
| Relative humidity | |
| ● Operation, max. | 90 % |

| Operating systems | |
|---|---|
| pre-installed operating system | |
| ● Windows CE | Yes |

| Configuration | |
|---|---|
| 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 |
| ● WinCC Advanced (TIA Portal) | Yes |
| ● WinCC Professional (TIA Portal) | Yes |

| 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 | 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 |
| **Multiproject** | |
| ● Number of projects (internal) | 0 |
| ● Number of projects (external) | 0 |
| **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 messages, other (SIMATIC S7, Sinumerik, Simotion, etc.) | 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 |
| **Recipe management** | |
| ● 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 |
| **Variables** | |
| ● Number of variables per device | 2 048 |
| ● Number of variables per screen | 400 |
| ● Limit values | Yes |
| ● Multiplexing | Yes |
| ● Structures | Yes |
| ● Arrays | Yes |
| **Images** | |
| ● Number of configurable images | 500 |
| ● Permanent window/default | Yes |

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| | | |
|---|---|---|
| ● Global image | Yes | |
| ● Image selection by PLC | Yes | |
| ● Image number in the PLC | Yes | |
| **Image objects** | | |
| ● 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 |
| **Process coupling** | |
| ● 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 |
| **Service tools/configuration aids** | |
| ● 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 |
| SIMATIC HMI SD memory card: Secure Digital memory card | Yes |
| USB memory | Yes |
| Network camera | Yes |
| Additional software components loadable | Yes; SIMATIC options |
| **Mechanics/material** | |
| Enclosure material (front) | |
| ● Plastic | Yes |
| ● Aluminum | No |
| ● Stainless steel | No |
| **Weights** | |
| Weight (without packaging) | 1.48 kg |
| Weight incl. packaging | 1.8 kg |

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