

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 | |
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| 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 | |
| • Direct keys (touch buttons as S7 input I/O) | 32 |
| Supply voltage | |
| Type of supply voltage | DC |
| Rated value (DC) | 24 V |

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| 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 |
| 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 |
| communication functions / header | |
| 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 | |

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| 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 |
| 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 / 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 |
| • WinCC Advanced (TIA Portal) | Yes |
| • WinCC Professional (TIA Portal) | Yes |
| Languages | |
| Online languages | |
| • Number of online/runtime languages | 32 |
| Project languages | |

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| • 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 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 |
| 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 |
| • Global image | Yes |
| • Image selection by PLC | Yes |
| • Image number in the PLC | Yes |
| Image objects | |
| • Number of objects per image | 400 |

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| • 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 |

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| • 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 |
| Dimensions | |
| Width of the housing front | 248.4 mm |
| Height of housing front | 171.7 mm |
| Weights | |
| Weight (without packaging) | 1.3 kg |
| Weight (with packaging) | 1.8 kg |
| last modified: | 9/20/2021  |