# SIEMENS

**Data sheet**                                                      **6AV2125-2DB23-0AX0**



SIMATIC HMI KTP400F Mobile with integrated acknowledgement button, emergency switching-off switch, Touch and Key operation, 4" widescreen TFT display, PROFINET interface, configurable from WinCC Comfort V13 SP1 with HSP

| General information | |
|---|---|
| Product type designation | KTP400F Mobile |
| **Display** | |
| Design of display | TFT |
| Screen diagonal | 4.3 in |
| Color display | Yes |
| Number of colors | 16 777 216 |
| Resolution (pixels) | |
| ● Horizontal image resolution | 480 pixel |
| ● Vertical image resolution | 272 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 | 4 |
| — Number of function keys with LEDs | 4 |
| ● 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 | No |
| ● Illuminated pushbutton | 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 |
| permissible range, lower limit (DC) | 19.2 V |

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| | |
|---|---|
| permissible range, upper limit (DC) | 28.8 V |
| **Input current** | |
| Current consumption (rated value) | 210 mA |
| Starting current inrush I²t | 0.37 A²·s |
| **Power** | |
| Active power input, typ. | 5 W |
| **Processor** | |
| Processor type | ARM |
| **Memory** | |
| Flash | Yes |
| RAM | Yes |
| Memory available for user data | 4 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 | 0 |
| **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 |
| **Interrupts/diagnostics/status information** | |
| Diagnoses | |
| ● Diagnostic information readable | Yes |
| **EMC** | |
| 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 |
| **Degree and class of protection** | |
| IP65 (all-round) | Yes |
| **Standards, approvals, certificates** | |
| CE mark | Yes |
| cULus | Yes |
| RCM (formerly C-TICK) | Yes |
| KC approval | No; Available soon |
| Suitable for safety functions | Yes |
| Marine approval | Yes |
| 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 |
| ● FM Class I Division 2 | No |
| Marine approval | |
| ● Germanischer Lloyd (GL) | Yes |
| ● American Bureau of Shipping (ABS) | Yes |
| ● Bureau Veritas (BV) | No; Available soon |
| ● Det Norske Veritas (DNV) | Yes |
| ● Korean Register of Shipping (KRS) | No |
| ● Lloyds Register of Shipping (LRS) | Yes |
| ● Nippon Kaiji Kyokai (Class NK) | Yes |
| ● Polski Rejestr Statkow (PRS) | No |
| ● Chinese Classification Society (CCS) | 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 |

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| | |
|---|---|
| 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 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 | 50 |
| ● Limit values | Yes |
| ● Multiplexing | Yes |
| ● Structures | Yes |
| ● Arrays | Yes |

| Images | |
|---|---|
| ● Number of configurable images | 500 |
| ● Permanent window/default | Yes |
| ● Global image | Yes |
| ● Pop-up images | Yes |
| ● Slide-in images | Yes |
| ● Image selection by PLC | Yes |
| ● Image number in the PLC | Yes |

| Image objects | |
|---|---|
| ● Number of objects per image | 50 |
| ● 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 | 5 |
| ● 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 | No |
| ● HTML browser | No |
| ● PDF display | No |
| ● IP camera display | 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 | No |
| — 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 |
| ● Report (shift log) | Yes |
| ● Hardcopy | Yes |
| ● Electronic print to file | No |

| 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 | Yes; Backup/restore |

| Process coupling | |
|---|---|
| ● S7-1200 | Yes |
| ● S7-1500 | Yes |
| ● S7-200 | Yes |
| ● S7-300/400 | Yes |
| ● LOGO! | Yes |
| ● WinAC | Yes; WinAC RTX |
| ● SINUMERIK | Yes; without NC channel |
| ● SIMOTION | Yes |
| ● Allen Bradley (EtherNet/IP) | Yes |
| ● Allen Bradley (DF1) | No |
| ● Mitsubishi (MC TCP/IP) | Yes |
| ● Mitsubishi (FX) | No |
| ● OMRON (FINS TCP) | No |
| ● OMRON (LINK/Multilink) | No |
| ● Modicon (Modbus TCP/IP) | Yes |
| ● Modicon (Modbus) | No |
| ● OPC UA Client | Yes |
| ● OPC UA Server | Yes |

| Service tools/configuration aids | |
|---|---|
| ● Backup/Restore manually | Yes |
| ● Backup/Restore automatically | No |
| ● Simulation | Yes |
| ● Device switchover | Yes |

| Peripherals/Options | |
|---|---|
| Printer | Yes |
| SIMATIC HMI MM memory card: Multi Media Card | No |
| SIMATIC HMI SD memory card: Secure Digital memory card | No |
| 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 | Yes |
| Additional software components loadable | Yes; SIMATIC options |

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| Mechanics/material | |
|---|---|
| Enclosure material (front) | |
| ● Plastic | Yes |
| ● Aluminum | No |
| ● Stainless steel | No |
| **Dimensions** | |
| Width of the housing front | 194 mm |
| Height of housing front | 166 mm |
| **Weights** | |
| Weight (without packaging) | 0.7 kg |
| Weight (with packaging) | 0.95 kg |

| | |
|---|---|
| **last modified:** | 3/2/2021 ↗ |

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