

SIMATIC HMI KTP900F MOBILE, 9.0" TFT DISPLAY, 800 X 480 PIXELS, 16M COLOR, KEY AND TOUCH OPERATION, 10 FUNCTION KEYS, 1 X PROFINET/INDUSTRIAL ETHERNET INTERFACE; 1 X MULTIMEDIA CARD, 1 X USB, ACKNOWLEDGEMENT SWITCH, EMERGENCY-STOP BUTTON, CONFIGURABLE FROM WINCC COMFORT V13 SP1



| General information            |                                          |
|--------------------------------|------------------------------------------|
| Product type designation       | SIMATIC HMI KTP900F Mobile               |
| Display                        |                                          |
| Design of display              | TFT widescreen display, LED backlighting |
| Screen diagonal                | 9 in                                     |
| 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      | 10                                       |
| • Keys with LED                | Yes                                      |
| • System keys                  | No                                       |

|                                                           |                         |
|-----------------------------------------------------------|-------------------------|
| • 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                     |
| Camera                                                    |                         |
| • integrated camera                                       | No                      |
| Expansions for operator control of the process            |                         |
| • DP direct LEDs (LEDs as S7 output I/O)<br>— F1...Fx     | 10                      |
| • Direct keys (keys as S7 input I/O)<br>— F1...Fx         | 10                      |
| • 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                  |
| Input current                                             |                         |
| Current consumption (rated value)                         | 450 mA                  |
| Starting current inrush $I^2t$                            | 0.135 A <sup>2</sup> ·s |
| Power                                                     |                         |
| Active power input, typ.                                  | 11 W                    |
| Processor                                                 |                         |
| Processor type                                            | ARM                     |
| 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         |
| <b>Time of day</b>                       |            |
| <b>Clock</b>                             |            |
| • Hardware clock (real-time)             | Yes        |
| • Software clock                         | No         |
| • 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 20 mA interfaces (TTY)         | 0          |
| Number of parallel interfaces            | 0          |
| Number of other interfaces               | 0          |
| Number of wireless interfaces            | 0          |
| Number of SD card slots                  | 1          |
| With software interfaces                 | No         |
| <b>Protocols</b>                         |            |
| PROFINET                                 | Yes        |
| Supports protocol for PROFINET IO        | Yes        |
| PROFIsafe                                | Yes        |
| PROFIBUS                                 | No         |
| MPI                                      | No         |
| <b>Protocols (Ethernet)</b>              |            |
| • TCP/IP                                 | Yes        |
| • DHCP                                   | Yes        |
| • SNMP                                   | Yes        |
| • DCP                                    | Yes        |
| • LLDP                                   | Yes        |
| <b>WEB characteristics</b>               |            |
| • 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                 |
| Interrupts/diagnostics/status information        |                    |
| Diagnostic messages                              |                    |
| • 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                |
| Marine approval                                  |                    |
| • Germanischer Lloyd (GL)                        | No; Available soon |
| • American Bureau of Shipping (ABS)              | Yes                |
| • Bureau Veritas (BV)                            | No; Available soon |
| • Det Norske Veritas (DNV)                       | No; Available soon |
| • Korean Register of Shipping (KRS)              | No                 |
| • Lloyds Register of Shipping (LRS)              | No; Available soon |
| • Nippon Kaiji Kyokai (Class NK)                 | No; Available soon |
| • Polski Rejestr Statkow (PRS)                   | No                 |
| • Chinese Classification Society (CCS)           | 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 |
| • FM Class I Division 2            | 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     |
| <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     |
| <b>Complex image objects</b>           |         |
| • 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                         | No      |
| • 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    |
| • Report (shift log)                   | Yes    |
| • Hardcopy                             | No     |
| • 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     |
| <b>Process coupling</b>                                  |                         |
| • 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)                                        | Yes                     |
| • OMRON (FINS TCP)                                       | No                      |
| • OMRON (LINK/Multilink)                                 | No                      |
| • Modicon (Modbus TCP/IP)                                | Yes                     |
| • Modicon (Modbus)                                       | No                      |
| • OPC UA Client                                          | Yes                     |
| • OPC UA Server                                          | Yes                     |
| <b>Service tools/configuration aids</b>                  |                         |
| • Backup/Restore manually                                | Yes                     |
| • Backup/Restore automatically                           | Yes                     |
| • Simulation                                             | Yes                     |
| • Device switchover                                      | Yes                     |
| <b>Peripherals/Options</b>                               |                         |
| <b>Peripherals</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>                                |                         |
| <b>Enclosure material (front)</b>                        |                         |
| • Plastic                                                | Yes                     |
| • Aluminum                                               | No                      |

- Stainless steel

No

#### Dimensions

Width of the housing front 307.5 mm

Height of housing front 223.5 mm

#### Weights

Weight without packaging 1.6 kg

Weight incl. packaging 1.7 kg

**last modified:** 08/09/2017