

SIMATIC HMI KTP900F Mobile, 9.0" TFT display, 800x 480 pixel, 16m colors, key and touch operation, 10 function keys, 1x PROFINET/Industrial Ethernet interface, 1x multimedia card, 1x USB, Key-operated switch, acknowledgement button, 1 emergency stop/stop button configurable from WinCC Comfort V13 SP1



| General information                                       |                                          |
|-----------------------------------------------------------|------------------------------------------|
| Product type designation                                  | KTP900F Mobile                           |
| Display                                                   |                                          |
| Design of display                                         | TFT widescreen display, LED backlighting |
| Screen diagonal                                           | 9 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                                 | 10                                       |
| — Number of function keys with LEDs                       | 10                                       |
| • 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                                      |
| Camera                                                    |                                          |
| • integrated camera                                       | No                                       |
| Expansions for operator control of the process            |                                          |
| • DP direct LEDs (LEDs as S7 output I/O)                  |                                          |
| — F1...Fx                                                 | 10                                       |
| • Direct keys (keys as S7 input I/O)                      |                                          |
| — 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                  |
| <b>Input current</b>                     |                         |
| Current consumption (rated value)        | 450 mA                  |
| Starting current inrush $I^2t$           | 0.135 A <sup>2</sup> ·s |
| <b>Power</b>                             |                         |
| Active power input, typ.                 | 11 W                    |
| <b>Processor</b>                         |                         |
| Processor type                           | ARM                     |
| <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     |
| 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                                       | Yes    |
| 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)                             | Yes    |
| • Det Norske Veritas (DNV)                        | Yes    |
| • Korean Register of Shipping (KRS)               | Yes    |
| • Lloyds Register of Shipping (LRS)               | Yes    |
| • Nippon Kaiji Kyokai (Class NK)                  | Yes    |
| • Polski Rejestr Statkow (PRS)                    | No     |
| • Chinese Classification Society (CCS)            | Yes    |
| 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                                           |         |
| • 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    |
| • 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                         | 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     |



|        |     |             |
|--------|-----|-------------|
| eClass | 12  | 27-33-02-02 |
| eClass | 9.1 | 27-33-02-02 |
| eClass | 9   | 27-33-02-02 |
| eClass | 8   | 27-24-23-03 |
| eClass | 7.1 | 27-24-23-03 |
| eClass | 6   | 27-24-23-03 |
| ETIM   | 9   | EC001427    |
| ETIM   | 8   | EC001427    |
| ETIM   | 7   | EC001427    |
| IDEA   | 4   | 6607        |
| UNSPSC | 15  | 43-21-15-06 |

# Approvals / Certificates

|                          |                                |
|--------------------------|--------------------------------|
| General Product Approval | For use in hazardous locations |
|--------------------------|--------------------------------|



[KC](#)



|                                |                   |
|--------------------------------|-------------------|
| For use in hazardous locations | Marine / Shipping |
|--------------------------------|-------------------|



[FM](#)

[CCC-Ex](#)



|                   |
|-------------------|
| Marine / Shipping |
|-------------------|



[NK / Nippon Kaiji Kyokai](#)



[CCS \(China Classification Society\)](#)



|             |
|-------------|
| Environment |
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