



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                                                  |                                          |
| • 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 <sup>2</sup> t | 0.135 A <sup>2</sup> ·s |
| <b>Power</b>                             |                         |
| Active power input, typ.                 | 11 W                    |
| <b>Processor</b>                         |                         |
| Processor type                           | ARM                     |
| <b>Storage</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                      |
| <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                      |
| <b>Redundancy mode</b>                   |                         |

|                                                   |        |
|---------------------------------------------------|--------|
| Media redundancy                                  |        |
| — MRP                                             | Yes    |
| Further protocols                                 |        |
| • 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         |        |
| 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 %   |

|                                                              |       |
|--------------------------------------------------------------|-------|
| <b>Operating systems</b>                                     |       |
| pre-installed operating system                               |       |
| • Windows CE                                                 | Yes   |
| <b>Configuration</b>                                         |       |
| Message indicator                                            | Yes   |
| Alarm system (incl. buffer and acknowledgment)               | Yes   |
| Process value display (output)                               | Yes   |
| Process value default (input) possible                       | Yes   |
| Recipe management                                            | Yes   |
| <b>Configuration software</b>                                |       |
| • 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   |
| <b>Languages</b>                                             |       |
| Online languages                                             |       |
| • Number of online/runtime languages                         | 32    |
| Project languages                                            |       |
| • Languages per project                                      | 32    |
| <b>Functionality under WinCC (TIA Portal)</b>                |       |
| 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   |
| <b>Multiproject</b>                                          |       |
| • Number of projects (internal)                              | 0     |
| • Number of projects (external)                              | 0     |
| <b>Message system</b>                                        |       |
| • 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                     |
| <b>Security</b>                                        |                         |
| • Number of user groups                                | 50                      |
| • Number of user rights                                | 32                      |
| • Number of users                                      | 50                      |
| • Password export/import                               | Yes                     |
| • SIMATIC Logon                                        | Yes                     |
| <b>Logging through printer</b>                         |                         |
| • Alarms                                               | Yes                     |
| • Report (shift log)                                   | Yes                     |
| • Hardcopy                                             | No                      |
| • Electronic print to file                             | No                      |
| <b>Character sets</b>                                  |                         |
| • Keyboard fonts                                       |                         |
| — US English                                           | Yes                     |
| <b>Transfer (upload/download)</b>                      |                         |
| • 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 (Host Link)                                    | No                      |
| • Modicon (Modbus TCP/IP)                              | Yes                     |
| • Modicon (Modbus RTU)                                 | 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>                             |                         |
| 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>               |                      |
| Enclosure material (front)              |                      |
| • Plastic                               | Yes                  |
| • Aluminum                              | No                   |
| • Stainless steel                       | No                   |
| <b>Weights</b>                          |                      |
| Weight (without packaging)              | 1.6 kg               |
| Weight (with packaging)                 | 1.7 kg               |

|                        |        |                |                       |
|------------------------|--------|----------------|-----------------------|
| <b>Classifications</b> |        |                |                       |
|                        |        | <b>Version</b> | <b>Classification</b> |
|                        | eClass | 16             | 27-33-02-02           |
|                        | eClass | 14             | 27-33-02-02           |
|                        | 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   | 10             | EC001427              |
|                        | ETIM   | 9              | EC001427              |
|                        | ETIM   | 8              | EC001427              |
|                        | ETIM   | 7              | EC001427              |
|                        | IDEA   | 4              | 6607                  |
|                        | UNSPSC | 15             | 43-21-15-06           |

|                                 |  |
|---------------------------------|--|
| <b>Approvals / Certificates</b> |  |
| <b>General Product Approval</b> |  |



|                                                                                     |                                                                                     |                                                                                     |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>General Product Approval</b>                                                     | <b>EMV</b>                                                                          | <b>Test Certificates</b>                                                            | <b>Maritime application</b>                                                           |
|  |  |  |  |

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

|                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Maritime application</b>                                                         |                                                                                     |                                                                                     |                                                                                     |                                                                                       |                                                                                       |
|  |  |  |  |  |  |

|                               |                              |                              |                                                                                     |                               |                                          |
|-------------------------------|------------------------------|------------------------------|-------------------------------------------------------------------------------------|-------------------------------|------------------------------------------|
| <b>other</b>                  | <b>Railway</b>               |                              |                                                                                     |                               |                                          |
| <a href="#">Miscellaneous</a> | <a href="#">Confirmation</a> | <a href="#">Confirmation</a> |  | <a href="#">Miscellaneous</a> | <a href="#">Special Test Certificate</a> |

|                    |
|--------------------|
| <b>Environment</b> |
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last modified:

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