



SIMATIC HMI KTP900 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, CONFIGURABLE FROM WINCC COMFORT V13 SP1

### Product type designation

#### Display

|                                |            |
|--------------------------------|------------|
| Screen diagonal                | 9 in       |
| Number of colors               | 16 000 000 |
| Resolution (pixels)            |            |
| • Horizontal image resolution  | 800 Pixel  |
| • Vertical image resolution    | 480 Pixel  |
| Backlighting                   |            |
| • MTBF backlighting (at 25 °C) | 50 000 h   |
| • Backlight dimmable           | Yes        |

#### Control elements

|                                 |     |
|---------------------------------|-----|
| Keyboard                        |     |
| • Function keys                 |     |
| — Number of function keys       | 10  |
| • Keys with LED                 | Yes |
| • System keys                   | No  |
| • Numeric/alphabetical input    |     |
| — Numeric keyboard              | Yes |
| — alphanumeric keyboard         | Yes |
| Touch operation                 |     |
| • Design as touch screen        | Yes |
| • Design as multitouch screen   | No  |
| Special operator controls       |     |
| • Stop button (forced blocking) | No  |

|                                                           |                         |
|-----------------------------------------------------------|-------------------------|
| • Emergency stop button (forced blocking)                 | No                      |
| • Emergency stop button (illuminated and forced blocking) | No                      |
| • Acknowledgement button (3-stage)                        | No                      |
| • Key-operated switch                                     | No                      |
| • Illuminated pushbutton                                  | Yes                     |
| <b>Camera</b>                                             |                         |
| • integrated camera                                       | No                      |
| <b>Expansions for operator control of the process</b>     |                         |
| • 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                      |
| <b>Supply voltage</b>                                     |                         |
| 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>                                              |                         |
| Power consumption, typ.                                   | 11 W                    |
| <b>Memory</b>                                             |                         |
| Flash                                                     | Yes                     |
| RAM                                                       | Yes                     |
| usable memory 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>                                        |                         |
| <b>Clock</b>                                              |                         |
| • Hardware clock (real-time clock)                        | Yes                     |
| • Software clock                                          | No                      |
| • battery-backed                                          | Yes                     |
| • synchronizable                                          | Yes                     |

|                                            |     |
|--------------------------------------------|-----|
| <b>Interfaces</b>                          |     |
| Number of RS 485 interfaces                | 0   |
| Number of USB interfaces                   | 1   |
| Number of 20 mA interfaces (TTY)           | 0   |
| Number of RS 232 interfaces                | 0   |
| Number of RS 422 interfaces                | 0   |
| Number of parallel interfaces              | 0   |
| Number of other interfaces                 | 0   |
| Number of SD card slots                    | 1   |
| With software interfaces                   | No  |
| <b>PROFINET IO</b>                         |     |
| • Number of PROFINET interfaces            | 1   |
| <b>Industrial Ethernet</b>                 |     |
| • Number of industrial Ethernet interfaces | 1   |
| <b>WLAN</b>                                |     |
| • Number of wireless interfaces            | 0   |
| <b>Protocols</b>                           |     |
| PROFINET                                   | Yes |
| PROFINET IO                                | Yes |
| PROFIsafe                                  | No  |
| 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  |
| <b>Further protocols</b>                   |     |
| • MODBUS                                   | Yes |
| • EtherNet/IP                              | 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                                      | Yes   |  |
| Suitable for safety functions                    | No    |  |
| Marine approval                                  |       |  |
| • Germanischer Lloyd (GL)                        | No    |  |
| • American Bureau of Shipping (ABS)              | No    |  |
| • Bureau Veritas (BV)                            | No    |  |
| • Det Norske Veritas (DNV)                       | No    |  |
| • Lloyds Register of Shipping (LRS)              | No    |  |
| • Nippon Kaiji Kyokai (Class NK)                 | No    |  |
| • Polski Rejestr Statkow (PRS)                   | No    |  |
| 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    |
| proprietary                                            | No     |
| Configuration                                          |        |
| Message indicator                                      | Yes    |
| Alarm logging system (incl. buffer and acknowledgment) | Yes    |
| Process value display (output)                         | Yes    |
| Process value default (input) possible                 | Yes    |
| Recipe administration                                  | 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     |
| • Project languages                                    |        |
| — D                                                    | Yes    |
| — GB                                                   | Yes    |
| — F                                                    | Yes    |
| — I                                                    | Yes    |
| — E                                                    | Yes    |
| — Chinese traditional                                  | Yes    |
| — Chinese simplified                                   | Yes    |

|            |     |
|------------|-----|
| — DK       | Yes |
| — FIN      | Yes |
| — GR       | Yes |
| — J        | Yes |
| — KP / ROK | Yes |
| — NL       | Yes |
| — N        | Yes |
| — PL       | Yes |
| — P        | Yes |
| — RUS      | Yes |
| — S        | Yes |
| — CZ       | Yes |
| — SK       | Yes |
| — TR       | Yes |
| — H        | Yes |

#### 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     |
| <b>Recipe administration</b>                                     |         |
| • 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     |
| • Start screen configurable                                      | 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    |
| 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     |
| • 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                           |     |
| — US American (English)              | Yes |
| • Fonts                              |     |
| — Tahoma                             | Yes |
| — Arial                              | Yes |
| — Courier New                        | Yes |
| — WinCC Standard                     | Yes |
| — Ideographic languages              | Yes |
| • Font size freely scalable          | Yes |
| • additional character sets loadable | Yes |
| Transfer (upload/download)           |     |
| • MPI/PROFIBUS DP                    | No  |
| • USB                                | No  |
| • Ethernet                           | Yes |
| • Wireless LAN                       | No  |
| • using external storage medium      | Yes |
| 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)                    | Yes |
| • OMRON (FINS TCP)                   | No  |
| • OMRON (LINK/Multilink)             | No  |
| • Modicon (Modbus TCP/IP)            | Yes |

|                                         |            |
|-----------------------------------------|------------|
| • Modicon (Modbus)                      | No         |
| <b>Service tools/configuration aids</b> |            |
| • Clean screen                          | Yes        |
| • Touch calibration                     | Yes        |
| • Backup/Restore manually               | Yes        |
| • Backup/Restore automatically          | Yes        |
| • Simulation                            | Yes        |
| • Device switchover                     | Yes        |
| • Delta transfer                        | No         |
| <b>Peripherals/Options</b>              |            |
| Peripherals                             |            |
| • Printer                               | Yes        |
| • MultiMediaCard                        | Yes        |
| • SD card                               | Yes        |
| • USB memory                            | Yes        |
| • Network camera                        | Yes        |
| Additional software components loadable | Yes        |
| <b>Mechanics/material</b>               |            |
| Type of housing (front)                 |            |
| • plastic                               | Yes        |
| • aluminum                              | No         |
| • Stainless steel                       | No         |
| <b>Dimensions</b>                       |            |
| Width of the housing front              | 307.5 mm   |
| Height of housing front                 | 200.9 mm   |
| <b>Weights</b>                          |            |
| Without packaging                       | 1.5 kg     |
| With packaging                          | 1.6 kg     |
| <b>last modified:</b>                   | 26.06.2015 |