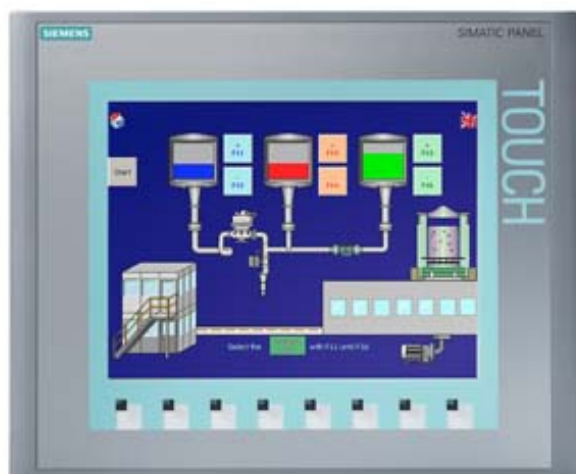


SIMATIC HMI KTP1000 Basic Color DP, Basic Panel, Key/touch operation, 10" TFT display, 256 colors, MPI/PROFIBUS DP interface, configurable as of WinCC flexible 2008 SP2 Compact/ WinCC Basic V11/ STEP 7 Basic V11, contains open-source software, which is provided free of charge see enclosed CD



### General information

|                          |                        |
|--------------------------|------------------------|
| Product type designation | KTP1000 Basic color DP |
|--------------------------|------------------------|

### Display

|                   |          |
|-------------------|----------|
| Design of display | TFT      |
| Screen diagonal   | 10.4 in  |
| Display width     | 211.2 mm |
| Display height    | 158.4 mm |
| Number of colors  | 256      |

### Resolution (pixels)

|                               |           |
|-------------------------------|-----------|
| • Horizontal image resolution | 640 Pixel |
| • Vertical image resolution   | 480 Pixel |

### Backlighting

|                                |          |
|--------------------------------|----------|
| • MTBF backlighting (at 25 °C) | 50 000 h |
| • Backlight dimmable           | No       |

### Control elements

#### Keyboard fonts

|                           |   |
|---------------------------|---|
| • Function keys           |   |
| — Number of function keys | 8 |

|                                                                       |                        |
|-----------------------------------------------------------------------|------------------------|
| — Number of function keys with LEDs                                   | 0                      |
| • Keys with LED                                                       | No                     |
| • System keys                                                         | No                     |
| • Numeric keyboard                                                    | Yes; Onscreen keyboard |
| • alphanumeric keyboard                                               | Yes; Onscreen keyboard |
| Touch operation                                                       |                        |
| • Design as touch screen                                              | Yes                    |
| Installation type/mounting                                            |                        |
| Mounting position                                                     | vertical               |
| Mounting in portrait format possible                                  | No                     |
| Mounting in landscape format possible                                 | Yes                    |
| maximum permissible angle of inclination without external ventilation | 35°                    |
| 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)                                     | 0.6 A                  |
| Starting current inrush I <sup>2</sup> t                              | 0.2 A <sup>2</sup> ·s  |
| Power                                                                 |                        |
| Active power input, typ.                                              | 15 W                   |
| Processor                                                             |                        |
| Processor type                                                        | RISC 32 bit            |
| Memory                                                                |                        |
| Flash                                                                 | Yes                    |
| RAM                                                                   | Yes                    |
| Memory available for user data                                        | 2 Mbyte                |
| Type of output                                                        |                        |
| Acoustics                                                             |                        |
| • Buzzer                                                              | Yes                    |
| • Speaker                                                             | No                     |
| Time of day                                                           |                        |
| Clock                                                                 |                        |
| • Hardware clock (real-time)                                          | No                     |
| • Software clock                                                      | Yes                    |
| • retentive                                                           | No                     |
| • synchronizable                                                      | Yes                    |

|                                                  |                           |
|--------------------------------------------------|---------------------------|
| <b>Interfaces</b>                                |                           |
| Number of industrial Ethernet interfaces         | 0                         |
| Number of RS 485 interfaces                      | 1                         |
| Number of RS 422 interfaces                      | 1                         |
| Number of RS 232 interfaces                      | 0                         |
| Number of USB interfaces                         | 0                         |
| Number of 20 mA interfaces (TTY)                 | 0                         |
| Number of parallel interfaces                    | 0                         |
| Number of other interfaces                       | 0                         |
| Number of SD card slots                          | 0                         |
| With software interfaces                         | No                        |
| <b>Industrial Ethernet</b>                       |                           |
| • Industrial Ethernet status LED                 | 0                         |
| <b>Protocols</b>                                 |                           |
| PROFINET                                         | No                        |
| Supports protocol for PROFINET IO                | No                        |
| IRT                                              | No                        |
| PROFIBUS                                         | Yes                       |
| MPI                                              | Yes                       |
| <b>Protocols (Ethernet)</b>                      |                           |
| • TCP/IP                                         | No                        |
| • DHCP                                           | No                        |
| • SNMP                                           | No                        |
| • DCP                                            | No                        |
| • LLDP                                           | No                        |
| <b>WEB characteristics</b>                       |                           |
| • HTTP                                           | No                        |
| • HTML                                           | No                        |
| <b>Further protocols</b>                         |                           |
| • CAN                                            | No                        |
| • EtherNet/IP                                    | No                        |
| • MODBUS                                         | Yes; Modicon (MODBUS RTU) |
| <b>Interrupts/diagnostics/status information</b> |                           |
| <b>Diagnostic messages</b>                       |                           |
| • Diagnostic information readable                | No                        |
| <b>Degree and class of protection</b>            |                           |
| IP (at the front)                                | IP65                      |
| IP (rear)                                        | IP20                      |
| NEMA (front)                                     |                           |
| • Enclosure Type 4 at the front                  | Yes                       |
| • Enclosure Type 4x at the front                 | Yes                       |

| Standards, approvals, certificates                |                       |
|---------------------------------------------------|-----------------------|
| CE mark                                           | Yes                   |
| cULus                                             | Yes                   |
| RCM (formerly C-TICK)                             | Yes                   |
| KC approval                                       | Yes                   |
| Use in hazardous areas                            |                       |
| • ATEX Zone 2                                     | No                    |
| • ATEX 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                   |
| • Lloyds Register of Shipping (LRS)               | Yes                   |
| • Nippon Kaiji Kyokai (Class NK)                  | Yes                   |
| • Polski Rejestr Statkow (PRS)                    | No                    |
| Ambient conditions                                |                       |
| Ambient temperature during operation              |                       |
| • Operation (vertical installation)               |                       |
| — For vertical installation, min.                 | 0 °C                  |
| — For vertical installation, max.                 | 50 °C                 |
| • Operation (max. tilt angle)                     |                       |
| — At maximum tilt angle, min.                     | 0 °C                  |
| — At maximum tilt angle, min.                     | 40 °C                 |
| Ambient temperature during storage/transportation |                       |
| • min.                                            | -20 °C                |
| • max.                                            | 60 °C                 |
| Relative humidity                                 |                       |
| • Operation, max.                                 | 90 %; no condensation |
| Operating systems                                 |                       |
| proprietary                                       | Yes                   |
| pre-installed operating system                    |                       |
| • Windows CE                                      | No                    |
| 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)            | Yes; via integrated WinCC Basic (TIA Portal) |
| • STEP 7 Professional (TIA Portal)     | Yes; via integrated WinCC Basic (TIA Portal) |
| • WinCC flexible Compact               | Yes                                          |
| • WinCC flexible Standard              | Yes                                          |
| • WinCC flexible Advanced              | Yes                                          |
| • WinCC Basic (TIA Portal)             | Yes                                          |
| • WinCC Comfort (TIA Portal)           | Yes                                          |
| • WinCC Advanced (TIA Portal)          | Yes                                          |
| • WinCC Professional (TIA Portal)      | Yes                                          |
| Languages                              |                                              |
| Online languages                       |                                              |
| • Number of online/runtime languages   | 5                                            |
| Project languages                      |                                              |
| • Languages per project                | 32                                           |
| Functionality under WinCC (TIA Portal) |                                              |
| Libraries                              | Yes                                          |
| Task planner                           |                                              |
| • time-controlled                      | No                                           |
| • task-controlled                      | Yes                                          |
| Message system                         |                                              |
| • Number of alarm classes              | 32                                           |
| • Bit messages                         |                                              |
| — Number of bit messages               | 200                                          |
| • Analog messages                      |                                              |
| — Number of analog messages            | 15                                           |
| • System messages HMI                  | Yes                                          |
| • Number of characters per message     | 80                                           |
| • Number of process values per message | 8                                            |
| • Message indicator                    | Yes                                          |
| • Message buffer                       |                                              |
| — Number of entries                    | 256                                          |
| — Circulating buffer                   | Yes                                          |
| — retentive                            | Yes                                          |
| — maintenance-free                     | Yes                                          |
| Recipe management                      |                                              |
| • Number of recipes                    | 5                                            |
| • Data records per recipe              | 20                                           |
| • Entries per data record              | 20                                           |
| • Size of internal recipe memory       | 40 kbyte                                     |

|                                        |     |
|----------------------------------------|-----|
| • Recipe memory expandable             | No  |
| <b>Variables</b>                       |     |
| • Number of variables per device       | 500 |
| • Number of variables per screen       | 30  |
| • Limit values                         | Yes |
| • Multiplexing                         | Yes |
| • Structures                           | No  |
| • Arrays                               | Yes |
| <b>Images</b>                          |     |
| • Number of configurable images        | 50  |
| • 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          | 30  |
| • 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 |
| • Buttons                              | Yes |
| • Graphic display                      | Yes |
| • Icons                                | Yes |
| • Geometric objects                    | Yes |
| <b>Complex image objects</b>           |     |
| • Number of complex objects per screen | 5   |
| • Alarm view                           | Yes |
| • Trend view                           | Yes |
| • User view                            | Yes |
| • Status/control                       | No  |
| • Sm@rtClient view                     | No  |
| • Recipe view                          | Yes |
| • f(x) trend view                      | No  |
| • System diagnostics view              | No  |
| • Media Player                         | No  |
| • Bar graphs                           | Yes |
| • Sliders                              | No  |
| • Pointer instruments                  | No  |
| • Analog/digital clock                 | No  |

|                                        |     |
|----------------------------------------|-----|
| Lists                                  |     |
| • Number of text lists per project     | 150 |
| • Number of entries per text list      | 30  |
| • Number of graphics lists per project | 100 |
| • Number of entries per graphics list  | 30  |
| Archiving                              |     |
| • Number of archives per device        | 0   |
| Security                               |     |
| • Number of user groups                | 50  |
| • Number of user rights                | 32  |
| • Number of users                      | 50  |
| • Password export/import               | No  |
| • SIMATIC Logon                        | No  |
| Character sets                         |     |
| • Keyboard fonts                       |     |
| — US English                           | Yes |
| Transfer (upload/download)             |     |
| • MPI/PROFIBUS DP                      | Yes |
| • USB                                  | No  |
| • Ethernet                             | No  |
| • using external storage medium        | No  |
| Process coupling                       |     |
| • S7-1200                              | Yes |
| • S7-1500                              | Yes |
| • S7-200                               | Yes |
| • S7-300/400                           | Yes |
| • LOGO!                                | Yes |
| • WinAC                                | Yes |
| • SINUMERIK                            | No  |
| • SIMOTION                             | No  |
| • Allen Bradley (EtherNet/IP)          | No  |
| • Allen Bradley (DF1)                  | Yes |
| • Mitsubishi (MC TCP/IP)               | No  |
| • Mitsubishi (FX)                      | Yes |
| • OMRON (FINS TCP)                     | No  |
| • OMRON (LINK/Multilink)               | Yes |
| • Modicon (Modbus TCP/IP)              | No  |
| • Modicon (Modbus)                     | Yes |
| Service tools/configuration aids       |     |
| • Backup/Restore manually              | Yes |
| • Backup/Restore automatically         | No  |

- Simulation
- Device switchover

Yes

Yes

### Peripherals/Options

|                                                        |    |
|--------------------------------------------------------|----|
| Printer                                                | No |
| SIMATIC HMI MM memory card: Multi Media Card           | No |
| SIMATIC HMI SD memory card: Secure Digital memory card | No |
| USB memory                                             | No |

### Mechanics/material

|                            |     |
|----------------------------|-----|
| Enclosure material (front) |     |
| • Plastic                  | Yes |
| • Aluminum                 | No  |
| • Stainless steel          | No  |

### Dimensions

|                            |        |
|----------------------------|--------|
| Width of the housing front | 335 mm |
| Height of housing front    | 275 mm |
| Mounting cutout, width     | 310 mm |
| Mounting cutout, height    | 248 mm |
| Overall depth              | 60 mm  |

### Weights

|                          |         |
|--------------------------|---------|
| Weight without packaging | 2.65 kg |
| Weight incl. packaging   | 3.52 kg |

**last modified:** 01/23/2020