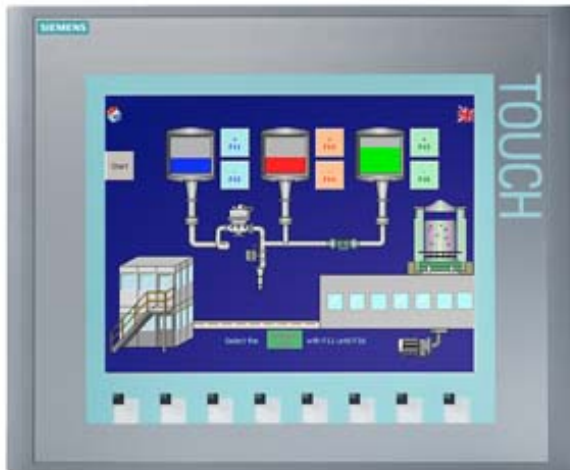


SIPLUS HMI KTP1000 Basic Color PN for medial exposure with conformal coating based on 6AV6647-0AF11-3AX0



| General information                 |                        |
|-------------------------------------|------------------------|
| Product type designation            | KTP1000 Basic color PN |
| 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               |
| 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 |
| <b>Touch operation</b>   |                        |
| • Design as touch screen | Yes                    |

|   |          |
|---|----------|
| <b>Installation type/mounting</b>                                     |          |
| Mounting position   | vertical |
| Rack mounting   | No       |
| Wall mounting/direct mounting   | No       |
| maximum permissible angle of inclination without external ventilation | 35°      |

|                                     |        |
|-------------------------------------|--------|
| <b>Supply voltage</b>               |        |
| Type of supply voltage              | DC     |
| permissible range, lower limit (DC) | 19.2 V |
| permissible range, upper limit (DC) | 28.8 V |

|  |                       |
|--|-----------------------|
| <b>Input current</b>                     |                       |
| Starting current inrush I <sup>2</sup> t | 0.2 A <sup>2</sup> ·s |

|                  |             |
|------------------|-------------|
| <b>Processor</b> |             |
| Processor type   | RISC 32 bit |

|                                |             |
|--------------------------------|-------------|
| <b>Memory</b>                  |             |
| Flash                          | Yes         |
| RAM                            | Yes         |
| Memory available for user data | 1 024 kbyte |

|                       |              |
|-----------------------|--------------|
| <b>Type of output</b> |              |
| Acoustics             | Sound signal |

|                    |     |
|--------------------|-----|
| <b>Time of day</b> |     |
| <b>Clock</b>       |     |
| • Software clock   | Yes |

|  |    |
|--|----|
| <b>Interfaces</b>                        |    |
| Number of industrial Ethernet interfaces | 1  |
| Number of RS 485 interfaces              | 0  |
| Number of RS 422 interfaces              | 0  |
| 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  |
| With software interfaces                 | No |

**Industrial Ethernet**

• Industrial Ethernet status LED

2

## Protocols

|                                   |     |
|-----------------------------------|-----|
| PROFINET                          | Yes |
| Supports protocol for PROFINET IO | No  |
| PROFIBUS                          | No  |
| MPI                               | No  |
| <b>Protocols (Ethernet)</b>       |     |
| • TCP/IP                          | Yes |
| • DHCP                            | Yes |
| • SNMP                            | Yes |
| • DCP                             | Yes |
| • LLDP                            | Yes |
| <b>Further protocols</b>          |     |
| • EtherNet/IP                     | Yes |
| • MODBUS                          | Yes |

## Degree and class of protection

|                   |      |
|-------------------|------|
| IP (at the front) | IP65 |
| IP (rear)         | IP20 |

## Ambient conditions

|   |   |
|---|---|
| Suited for indoor use   | Yes   |
| Suited for outdoor use  | No  |
| <b>Ambient temperature during operation</b>                         |   |
| • Operation (vertical installation)                                 | 0 to +50 °C   |
| — For vertical installation, min.                                   | 0 °C  |
| — For vertical installation, max.                                   | 50 °C   |
| • Operation (max. tilt angle)                                       | 0 to +40 °C   |
| — At maximum tilt angle, min.                                       | 0 °C  |
| — At maximum tilt angle, min.                                       | 40 °C   |
| <b>Ambient temperature during storage/transportation</b>            |   |
| • min.  | -20 °C  |
| • max.  | 60 °C   |
| <b>Altitude during operation relating to sea level</b>              |   |
| • Installation altitude above sea level, max.                       | 5 000 m   |
| • Ambient air temperature-barometric pressure-altitude              | Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m) |
| <b>Relative humidity</b>  |   |
| • With condensation, tested in accordance with IEC 60068-2-38, max. | 100 %; RH incl. condensation/frost (no commissioning under condensation conditions)   |
| <b>Resistance</b>   |   |
| Coolants and lubricants   |   |

|   |  |
|---|--|
| — Resistant to commercially available coolants and lubricants   | Yes; Incl. diesel and oil droplets in the air  |
| <b>Use in stationary industrial systems</b>   |  |
| — to biologically active substances according to EN 60721-3-3   | Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request |
| — to chemically active substances according to EN 60721-3-3   | Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *           |
| — to mechanically active substances according to EN 60721-3-3   | Yes; Class 3S4 incl. sand, dust, *   |
| <b>Use on ships/at sea</b>  |  |
| — to biologically active substances according to EN 60721-3-6   | Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request                      |
| — to chemically active substances according to EN 60721-3-6   | Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *           |
| — to mechanically active substances according to EN 60721-3-6   | Yes; Class 6S3 incl. sand, dust; *   |
| <b>Remark</b>   |  |
| — Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04             | * The supplied plug covers must remain in place over the unused interfaces during operation!       |
| <b>Conformal coating</b>  |  |
| • Coatings for printed circuit board assemblies acc. to EN 61086  | Yes; Class 2 for high reliability  |
| • Protection against fouling acc. to EN 60664-3   | Yes; Type 1 protection   |
| • Military testing according to MIL-I-46058C, Amendment 7   | Yes; Discoloration of coating possible during service life   |
| • Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A | Yes; Conformal coating, Class A  |
| <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>Languages</b>  |  |
| <b>Online languages</b>   |  |
| • Number of online/runtime languages  | 5  |
| <b>Project languages</b>  |  |
| • Languages per project   | 32   |
| <b>Functionality under WinCC (TIA Portal)</b>   |  |
| Libraries   | Yes  |
| Applications/options  | none   |

|  |  |
|--|--|
| • Web browser  | No   |
| • SIMATIC WinCC Sm@rtServer                                      | No   |
| Task planner   | Yes  |
| Help system  | Yes  |
| • Number of characters per info text                             | 320  |
| <b>Message system</b>  |  |
| • Number of alarm classes  | 32   |
| • Bit messages   | Yes  |
| — Number of bit messages   | 200  |
| • Analog messages  | Yes  |
| — Number of analog messages                                      | 15   |
| • System messages HMI  | Yes  |
| • System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.) | No   |
| • Number of characters per message                               | 80   |
| • Number of process values per message                           | 8  |
| • Message indicator  | Yes  |
| • Message buffer   | Ring buffer (n x 256 entries), retentive, maintenance-free |
| — Number of entries  | 256  |
| — Circulating buffer   | Yes  |
| <b>Recipe management</b>   |  |
| • 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   |
| <b>Images</b>  |  |
| • Number of configurable images                                  | 50   |
| • Permanent window/default                                       | Yes; No permanent window can be configured                 |
| • Image selection by PLC   | Yes  |
| • Image number in the PLC  | Yes  |
| <b>Complex image objects</b>                                     |  |
| • Status/control   | No   |
| <b>Lists</b>   |  |
| • Number of text lists per project                               | 150  |
| • Number of graphics lists per project                           | 100  |

| Security   |                             |
|--|-----------------------------|
| • Number of user groups                                | 50                          |
| • Number of user rights                                | 32                          |
| • Password export/import                               | No                          |
| Character sets   |                             |
| • Keyboard fonts                                       | US American (English)       |
| — US English   | Yes                         |
| Transfer (upload/download)                             |                             |
| • MPI/PROFIBUS DP                                      | No                          |
| • USB  | No                          |
| • Ethernet   | Yes                         |
| • using external storage medium                        | No                          |
| Process coupling                                       |                             |
| • S7-200   | Yes; Via CP                 |
| • S7-300/400   | Yes                         |
| • WinAC  | No                          |
| • SINUMERIK  | No                          |
| • SIMOTION   | No                          |
| • Allen Bradley (DF1)                                  | No                          |
| • Mitsubishi (FX)                                      | No                          |
| • OMRON (LINK/Multilink)                               | No                          |
| • Modicon (Modbus)                                     | Yes; MODBUS TCP/IP protocol |
| Service tools/configuration aids                       |                             |
| • Backup/Restore manually                              | Yes                         |
| • Simulation   | Yes                         |
| • Device switchover                                    | Yes                         |
| Peripherals/Options                                    |                             |
| Peripherals  | none                        |
| 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                          |
| 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      |
| <b>Weights</b>           |            |
| Weight without packaging | 2.65 kg    |
| Weight incl. packaging   | 3.38 kg    |
| <b>last modified:</b>    | 10/09/2020 |