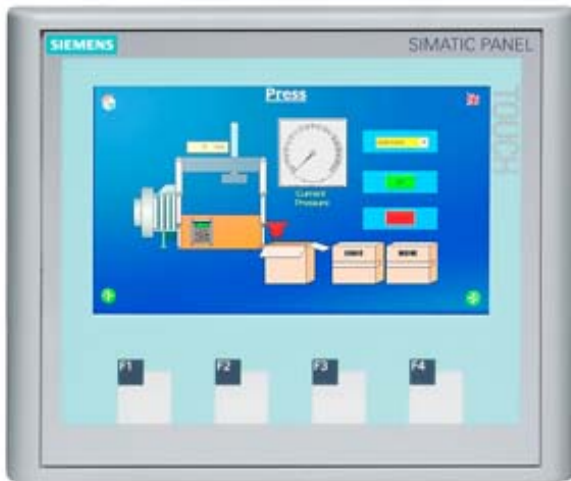


SIMATIC HMI KTP400 Basic Color PN, Basic Panel, Key/touch operation, 4" widescreen TFT display, 256 colors, PROFINET interface, configurable from WinCC Basic V11 SP2/ STEP 7 Basic V11 SP2, contains open-source software, which is provided free of charge see enclosed CD



General information	
Product type designation	KTP400 Basic color PN
Display	
Design of display	TFT
Screen diagonal	4.3 in
Display width	95 mm
Display height	53.8 mm
Number of colors	256
Resolution (pixels)	
• Horizontal image resolution	480 Pixel
• Vertical image resolution	272 Pixel
Backlighting	
• MTBF backlighting (at 25 °C)	50 000 h
• Backlight dimmable	No
Control elements	
Keyboard fonts	
• Function keys	
— Number of function keys	4

— 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
Wall mounting/direct mounting	No
Mounting in portrait format possible	Yes
Mounting in landscape format possible	Yes
maximum permissible angle of inclination without external ventilation	35°
<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)	0.1 A
Starting current inrush I <sup>2</sup> t	0.5 A <sup>2</sup> ·s
<b>Power</b>	
Active power input, typ.	2 W
<b>Processor</b>	
Processor type	RISC 32 bit
<b>Memory</b>	
Flash	Yes
RAM	Yes
Memory available for user data	1 Mbyte
<b>Type of output</b>	
Acoustics	
• Buzzer	Yes
• Speaker	No
<b>Time of day</b>	
Clock	
• Hardware clock (real-time)	No
• Software clock	Yes
• retentive	No

- synchronizable

Yes

## Interfaces

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
Number of SD card slots	0
With software interfaces	No

## Industrial Ethernet

- Industrial Ethernet status LED

2

## Protocols

PROFINET	Yes
Supports protocol for PROFINET IO	No
IRT	No
PROFIBUS	No
MPI	No

## Protocols (Ethernet)

- TCP/IP
- DHCP
- SNMP
- DCP
- LLDP

Yes  
Yes  
Yes  
Yes  
Yes

## WEB characteristics

- HTTP
- HTML

No  
No

## Further protocols

- CAN
- EtherNet/IP
- MODBUS

No  
Yes  
Yes; Modicon (MODBUS TCP/IP)

## Interrupts/diagnostics/status information

### Diagnoses

- Diagnostic information readable

No

## EMC

### Emission of radio interference acc. to EN 55 011

- Limit class A, for use in industrial areas
- Limit class B, for use in residential areas

Yes  
No

Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP20
NEMA (front)	
<ul style="list-style-type: none"> <li>• Enclosure Type 4 at the front</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Enclosure Type 4x at the front</li> </ul>	Yes
Standards, approvals, certificates	
CE mark	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
Use in hazardous areas	
<ul style="list-style-type: none"> <li>• ATEX Zone 2</li> </ul>	No
<ul style="list-style-type: none"> <li>• ATEX Zone 22</li> </ul>	No
<ul style="list-style-type: none"> <li>• cULus Class I Zone 1</li> </ul>	No
<ul style="list-style-type: none"> <li>• cULus Class I Zone 2, Division 2</li> </ul>	No
<ul style="list-style-type: none"> <li>• FM Class I Division 2</li> </ul>	No
Marine approval	
<ul style="list-style-type: none"> <li>• Germanischer Lloyd (GL)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• American Bureau of Shipping (ABS)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Bureau Veritas (BV)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Det Norske Veritas (DNV)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Lloyds Register of Shipping (LRS)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Nippon Kaiji Kyokai (Class NK)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Polski Rejestr Statkow (PRS)</li> </ul>	Yes
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>• Operation (vertical installation) <ul style="list-style-type: none"> <li>— For vertical installation, min.</li> <li>— For vertical installation, max.</li> </ul> </li> </ul>	 0 °C 50 °C
<ul style="list-style-type: none"> <li>• Operation (max. tilt angle) <ul style="list-style-type: none"> <li>— At maximum tilt angle, min.</li> <li>— At maximum tilt angle, min.</li> </ul> </li> </ul>	 0 °C 40 °C
<ul style="list-style-type: none"> <li>• Operation (vertical installation, portrait format) <ul style="list-style-type: none"> <li>— For vertical installation, min.</li> <li>— For vertical installation, max.</li> </ul> </li> </ul>	 0 °C 40 °C
<ul style="list-style-type: none"> <li>• Operation (max. tilt angle, portrait format) <ul style="list-style-type: none"> <li>— At maximum tilt angle, min.</li> <li>— At maximum tilt angle, min.</li> </ul> </li> </ul>	 0 °C 35 °C
Ambient temperature during storage/transportation	
<ul style="list-style-type: none"> <li>• min.</li> </ul>	-20 °C

• max.	60 °C
<b>Relative humidity</b>	
• Operation, max.	90 %; no condensation

### Operating systems

proprietary	Yes
<b>pre-installed operating system</b>	
• 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	No
• WinCC flexible Standard	No
• WinCC flexible Advanced	No
• WinCC Basic (TIA Portal)	Yes
• WinCC Comfort (TIA Portal)	Yes
• WinCC Advanced (TIA Portal)	Yes
• WinCC Professional (TIA Portal)	Yes

### Languages

<b>Online languages</b>	
• Number of online/runtime languages	5
<b>Project languages</b>	
• Languages per project	32

### Functionality under WinCC (TIA Portal)

Libraries	Yes
<b>Task planner</b>	
• time-controlled	No
• task-controlled	Yes
<b>Help system</b>	
• Number of characters per info text	320
<b>Message system</b>	
• 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
<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
• Arrays	Yes
<b>Images</b>	
• Number of configurable images	50
• Permanent window/default	Yes; No permanent window can be configured
• 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; Predefined screen objects
• Geometric objects	Yes

Complex image objects	
• 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	No
• USB	No
• Ethernet	Yes
• using external storage medium	No
Process coupling	
• S7-1200	Yes
• S7-1500	Yes
• S7-200	Yes
• S7-300/400	Yes

- LOGO! Yes
- WinAC No
- SINUMERIK No
- SIMOTION No
- Allen Bradley (EtherNet/IP) Yes
- Allen Bradley (DF1) No
- Mitsubishi (MC TCP/IP) Yes
- Mitsubishi (FX) No
- OMRON (FINS TCP) No
- OMRON (LINK/Multilink) No
- Modicon (Modbus TCP/IP) Yes
- Modicon (Modbus) No

#### Service tools/configuration aids

- Backup/Restore manually Yes
- Backup/Restore automatically No
- Simulation Yes
- Device switchover 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	140 mm
Height of housing front	116 mm
Mounting cutout, width	123 mm
Mounting cutout, height	99 mm
Overall depth	33 mm

#### Weights

Weight without packaging	0.34 kg
Weight incl. packaging	0.45 kg

**last modified:** 10/09/2020