



\*\*\* spare part \*\*\* SIMATIC HMI KTP400 Basic mono PN, Basic Panel, key/touch operation, 4" STN display, 4 gray levels, PROFINET interface, configurable as of WinCC flexible 2008 SP2 Compact/ WinCC Basic V10.5/ STEP 7 Basic V10.5, contains open-source software, which is provided free of charge see enclosed CD

General information	
Product type designation	KTP400 Basic mono PN
Display	
Design of display	STN
Screen diagonal	3.8 in
Display width	76.8 mm
Display height	57.6 mm
Number of colors	4; Grayscale
Resolution (pixels)	
• Horizontal image resolution	320 pixel
• Vertical image resolution	240 pixel
Backlighting	
• MTBF backlighting (at 25 °C)	30 000 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
Touch operation	
• Design as touch screen	Yes; Analog-resistive
Installation type/mounting	
Mounting position	vertical
Rack mounting	No
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°
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)	0.1 A
Starting current inrush I <sub>st</sub>	0.5 A <sup>2</sup> ·s
<b>Power</b>	
Active power input, typ.	3 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
<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
Number of SD card slots	0
With software interfaces	No
<b>Industrial Ethernet</b>	
• Industrial Ethernet status LED	2
<b>Protocols</b>	
PROFINET	Yes
Supports protocol for PROFINET IO	No
IRT	No
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	No
• HTML	No
<b>Further protocols</b>	
• CAN	No
• MODBUS	Yes; Modicon (MODBUS TCP/IP)
<b>Interrupts/diagnostics/status information</b>	
<b>Diagnoses</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
<b>Standards, approvals, certificates</b>	
CE mark	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
<b>Use in hazardous areas</b>	
• ATEX Zone 2	No; valid only when stated on the device nameplate!
• ATEX Zone 22	No; valid only when stated on the device nameplate!
• IECEx Zone 2	No; valid only when stated on the device nameplate!
• IECEx Zone 22	No; valid only when stated on the device nameplate!
• cULus Class I Zone 1	No; valid only when stated on the device nameplate!
• cULus Class I Zone 2, Division 2	No; valid only when stated on the device nameplate!
• cULus Class II Division 2	No; valid only when stated on the device nameplate!
• FM Class I Division 2	No; valid only when stated on the device nameplate!
• FM Class II Division 2	No; valid only when stated on the device nameplate!
<b>Marine approval</b>	
• Germanischer Lloyd (GL)	Yes; valid only when stated on the device nameplate!
• American Bureau of Shipping (ABS)	Yes; valid only when stated on the device nameplate!
• Bureau Veritas (BV)	Yes
• Det Norske Veritas (DNV)	Yes
• Korean Register of Shipping (KRS)	No
• Lloyds Register of Shipping (LRS)	Yes
• Nippon Kaiji Kyokai (Class NK)	Yes
• Polski Rejestr Statkow (PRS)	Yes
• Chinese Classification Society (CCS)	No
<b>Ambient conditions</b>	
Suited for indoor use	Yes
Suited for outdoor use	No
<b>Ambient temperature during operation</b>	
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, max.	40 °C
Operation (vertical installation, portrait format)	
— For vertical installation, min.	0 °C
— For vertical installation, max.	50 °C
Operation (max. tilt angle, portrait format)	
— At maximum tilt angle, min.	0 °C
— At maximum tilt angle, max.	40 °C
<b>Ambient temperature during storage/transportation</b>	
• min.	-20 °C
• max.	60 °C
<b>Relative humidity</b>	
• Operation, max.	90 %; no condensation
<b>Operating systems</b>	
proprietary	Yes
<b>pre-installed operating system</b>	
• Windows CE	No
<b>configuration / header</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>	

<ul style="list-style-type: none"> <li>• STEP 7 Basic (TIA Portal)</li> <li>• STEP 7 Professional (TIA Portal)</li> <li>• WinCC flexible Compact</li> <li>• WinCC flexible Standard</li> <li>• WinCC flexible Advanced</li> <li>• WinCC Basic (TIA Portal)</li> <li>• WinCC Comfort (TIA Portal)</li> <li>• WinCC Advanced (TIA Portal)</li> <li>• WinCC Professional (TIA Portal)</li> </ul>	Yes; via integrated WinCC Basic (TIA Portal) Yes; via integrated WinCC Basic (TIA Portal) Yes Yes Yes Yes Yes Yes Yes
<b>Languages</b>	
<b>Online languages</b>	
<ul style="list-style-type: none"> <li>• Number of online/runtime languages</li> </ul>	5
<b>Project languages</b>	
<ul style="list-style-type: none"> <li>• Languages per project</li> </ul>	32
<b>Functionality under WinCC (TIA Portal)</b>	
Libraries	Yes
Applications/options	none
<ul style="list-style-type: none"> <li>• Web browser</li> <li>• SIMATIC WinCC Sm@rtServer</li> </ul>	No No
Task planner	
<ul style="list-style-type: none"> <li>• time-controlled</li> <li>• task-controlled</li> </ul>	No Yes
Help system	
<ul style="list-style-type: none"> <li>• Number of characters per info text</li> </ul>	320
<b>Message system</b>	
<ul style="list-style-type: none"> <li>• Number of alarm classes</li> <li>• Bit messages               <ul style="list-style-type: none"> <li>— Number of bit messages</li> </ul> </li> <li>• Analog messages               <ul style="list-style-type: none"> <li>— Number of analog messages</li> </ul> </li> <li>• System messages HMI</li> <li>• System event, more (SIMATIC S7, SINUMERIK, SIMOTION, ... )</li> <li>• Number of characters per message</li> <li>• Number of process values per message</li> <li>• Message indicator</li> <li>• Message buffer               <ul style="list-style-type: none"> <li>— Number of entries</li> <li>— Circulating buffer</li> <li>— retentive</li> <li>— maintenance-free</li> </ul> </li> </ul>	32 Yes 200 Yes 15 Yes No 80 8 Yes Yes 256 Yes Yes Yes
<b>Recipe management</b>	
<ul style="list-style-type: none"> <li>• Number of recipes</li> <li>• Data records per recipe</li> <li>• Entries per data record</li> <li>• Size of internal recipe memory</li> <li>• Recipe memory expandable</li> </ul>	5 20 20 40 kbyte No
<b>Variables</b>	
<ul style="list-style-type: none"> <li>• Number of variables per device</li> <li>• Number of variables per screen</li> <li>• Limit values</li> <li>• Multiplexing</li> <li>• Structures</li> <li>• Arrays</li> </ul>	250 30 Yes Yes No Yes
<b>Images</b>	
<ul style="list-style-type: none"> <li>• Number of configurable images</li> <li>• Permanent window/default</li> <li>• Global image</li> <li>• Image selection by PLC</li> <li>• Image number in the PLC</li> </ul>	50 Yes Yes Yes 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
<b>Lists</b>	
• 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
<b>Archiving</b>	
• Number of archives per device	0
<b>Security</b>	
• Number of user groups	50
• Number of user rights	32
• Number of users	50
• Password export/import	No
• SIMATIC Logon	No
<b>Character sets</b>	
• Keyboard fonts — US English	Yes
<b>Transfer (upload/download)</b>	
• MPI/PROFIBUS DP	No
• USB	No
• Ethernet	Yes
• using external storage medium	No
<b>Process coupling</b>	
• 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)	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
<b>Service tools/configuration aids</b>	
• Backup/Restore manually	Yes
• Backup/Restore automatically	No
• Simulation	Yes
• Device switchover	Yes
<b>Peripherals/Options</b>	
Printer	No
SIMATIC HMI MM memory card: Multi Media Card	No
SIMATIC HMI SD memory card: Secure Digital memory card	No
USB memory	No
<b>Mechanics/material</b>	
Enclosure material (front)	
• Plastic	Yes
• Aluminum	No
• Stainless steel	No
<b>Dimensions</b>	
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	40 mm
<b>Weights</b>	
Weight (without packaging)	0.32 kg
Weight (with packaging)	0.53 kg

**last modified:**

10/8/2021 