

SIMATIC HMI KP300 BASIC MONO PN, BASIC PANEL, KEY OPERATION, 3" FSTN LCD DISPLAY, MONOCHROME BLACK/WHITE, PROFINET INTERFACE, CONFIGURATION FROM WINCC BASIC V11/ STEP7 BASIC V11, CONTAINS OPEN SOURCE SW WHICH IS PROVIDED FREE OF CHARGE FOR DETAILS SEE CD



General information	
Product type designation	SIMATIC HMI KP300 Basic mono PN
Display	
Design of display	FSTN
Screen diagonal	3.6 in
Display width	87 mm
Display height	31 mm
Number of colors	4; Backlit display only (white, red, green, yellow)
Resolution (pixels)	
• Horizontal image resolution	240 Pixel
• Vertical image resolution	80 Pixel
Backlighting	
• MTBF backlighting (at 25 °C)	50 000 h
• Backlight dimmable	No
Control elements	
Keyboard fonts	
• Function keys	
— Number of function keys	10

• Keys with LED	No
• System keys	Yes
• Numeric/alphabetical input	
— Numeric keyboard	Yes; Keyboard
— alphanumeric keyboard	Yes; Keyboard
<b>Touch operation</b>	
• Design as touch screen	No
<b>Installation type/mounting</b>	
Mounting position	vertical
Mounting in portrait format possible	No
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>	
Power consumption, 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	No
• Speaker	No
<b>Time of day</b>	
<b>Clock</b>	
• 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 USB interfaces	0
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	0
With software interfaces	No
Industrial Ethernet	
<ul style="list-style-type: none"> <li>Industrial Ethernet status LED</li> </ul>	2
Protocols	
PROFINET	Yes
Supports protocol for PROFINET IO	No
IRT	No
PROFIBUS	No
MPI	No
Protocols (Ethernet)	
<ul style="list-style-type: none"> <li>TCP/IP</li> <li>DHCP</li> <li>SNMP</li> <li>DCP</li> <li>LLDP</li> </ul>	Yes Yes Yes Yes Yes
WEB characteristics	
<ul style="list-style-type: none"> <li>HTTP</li> <li>HTML</li> </ul>	No No
Further protocols	
<ul style="list-style-type: none"> <li>CAN</li> <li>MODBUS</li> <li>EtherNet/IP</li> </ul>	No Yes; Modicon (MODBUS TCP/IP) Yes
Interrupts/diagnostics/status information	
Diagnostic messages	
<ul style="list-style-type: none"> <li>Diagnostic information readable</li> </ul>	No
EMC	
Emission of radio interference acc. to EN 55 011	
<ul style="list-style-type: none"> <li>Limit class A, for use in industrial areas</li> <li>Limit class B, for use in residential areas</li> </ul>	Yes No
Degree and class of protection	
IP (at the front)	IP65

Enclosure Type 4 at the front	Yes
Enclosure Type 4x at the front	Yes
IP (rear)	IP20

### Standards, approvals, certificates

CE mark	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes

### Marine approval

<ul style="list-style-type: none"> <li>• Germanischer Lloyd (GL)</li> <li>• American Bureau of Shipping (ABS)</li> <li>• Bureau Veritas (BV)</li> <li>• Det Norske Veritas (DNV)</li> <li>• Lloyds Register of Shipping (LRS)</li> <li>• Nippon Kaiji Kyokai (Class NK)</li> <li>• Polski Rejestr Statkow (PRS)</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>No</li> </ul>
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### Use in hazardous areas

<ul style="list-style-type: none"> <li>• ATEX Zone 2</li> <li>• ATEX Zone 22</li> <li>• cULus Class I Zone 1</li> <li>• cULus Class I Zone 2, Division 2</li> <li>• FM Class I Division 2</li> </ul>	<ul style="list-style-type: none"> <li>No</li> <li>No</li> <li>No</li> <li>Yes</li> <li>No</li> </ul>
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### 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> <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>	<ul style="list-style-type: none"> <li>0 °C</li> <li>50 °C</li> <li>0 °C</li> <li>40 °C</li> </ul>
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#### Ambient temperature during storage/transportation

<ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> </ul>	<ul style="list-style-type: none"> <li>-20 °C</li> <li>60 °C</li> </ul>
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#### Relative humidity

<ul style="list-style-type: none"> <li>• Operation, max.</li> </ul>	90 %; no condensation
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### Operating systems

proprietary	Yes
pre-installed operating system	
<ul style="list-style-type: none"> <li>• Windows CE</li> </ul>	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 management	Yes
<b>Configuration software</b>	
• 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
<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
Task planner	
• time-controlled	No
• task-controlled	Yes
Help system	Yes
• 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	250
• 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
<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

#### Service tools/configuration aids

- Backup/Restore manually Yes
- Backup/Restore automatically No
- Simulation Yes
- Device switchover Yes

#### Peripherals/Options

##### Peripherals

- 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	165 mm
Height of housing front	97 mm
Mounting cutout, width	149 mm
Mounting cutout, height	82 mm
Overall depth	30 mm

#### Weights

Weight without packaging	0.25 kg
Weight incl. packaging	0.38 kg

**last modified:** 07/13/2016