

SIPLUS HMI KP300 Basic mono PN -25...+60°C with conformal coating based on 6AV6647-0AH11-3AX0

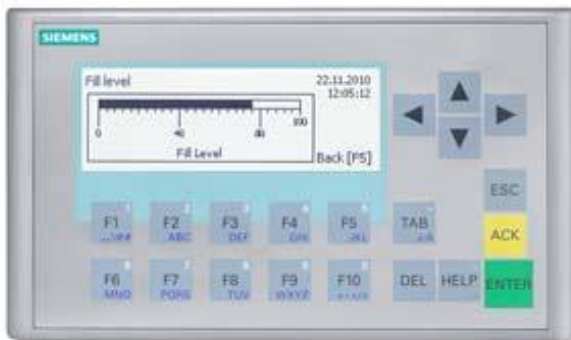


Figure similar

General information	
Product type designation	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
— Number of function keys with LEDs	0
• Keys with LED	No
• System keys	Yes
• 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
Wall mounting/direct mounting	No
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>	
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	512 kbyte

<b>Type of output</b>	
Acoustics	
• Buzzer	No
• 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 Yes
- DHCP Yes
- SNMP Yes
- DCP Yes
- LLDP Yes

### WEB characteristics

- HTTP No
- HTML No

### Further protocols

- CAN No
- EtherNet/IP Yes
- MODBUS Yes; Modicon (MODBUS TCP/IP)

### Interrupts/diagnostics/status information

#### Diagnoses

- Diagnostic information readable No

### Degree and class of protection

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>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.	-25 °C
— For vertical installation, max.	60 °C
• Operation (max. tilt angle)	
— At maximum tilt angle, min.	-25 °C
— At maximum tilt angle, min.	40 °C
<b>Ambient temperature during storage/transportation</b>	
• min.	-30 °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>	
<b>Coolants and lubricants</b>	
— 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>Usage in industrial process technology</b>	
— Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)
— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
<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>Operating systems</b>	
proprietary	Yes
<b>pre-installed operating system</b>	
• Windows CE	No
<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>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

Project languages	
• Languages per project	32
Functionality under WinCC (TIA Portal)	
Libraries	Yes
Task planner	
• time-controlled	No
• task-controlled	Yes
Help system	
• Number of characters per info text	320
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
Variables	
• Number of variables per device	250
• Number of variables per screen	30
• Limit values	Yes
• Multiplexing	Yes
• Structures	No
• Arrays	Yes
Images	
• 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
• Pointer instruments	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>	

<ul style="list-style-type: none"> <li>• Keyboard fonts <ul style="list-style-type: none"> <li>— US English</li> </ul> </li> </ul>	Yes
<b>Transfer (upload/download)</b>	
<ul style="list-style-type: none"> <li>• MPI/PROFIBUS DP</li> </ul>	No
<ul style="list-style-type: none"> <li>• USB</li> </ul>	No
<ul style="list-style-type: none"> <li>• Ethernet</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• using external storage medium</li> </ul>	No
<b>Process coupling</b>	
<ul style="list-style-type: none"> <li>• S7-1200</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• S7-200</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• S7-300/400</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• WinAC</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• SINUMERIK</li> </ul>	No
<ul style="list-style-type: none"> <li>• SIMOTION</li> </ul>	No
<ul style="list-style-type: none"> <li>• Allen Bradley (EtherNet/IP)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Allen Bradley (DF1)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Mitsubishi (MC TCP/IP)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Mitsubishi (FX)</li> </ul>	No
<ul style="list-style-type: none"> <li>• OMRON (FINS TCP)</li> </ul>	No
<ul style="list-style-type: none"> <li>• OMRON (LINK/Multilink)</li> </ul>	No
<ul style="list-style-type: none"> <li>• Modicon (Modbus TCP/IP)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Modicon (Modbus)</li> </ul>	No
<b>Service tools/configuration aids</b>	
<ul style="list-style-type: none"> <li>• Backup/Restore manually</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Backup/Restore automatically</li> </ul>	No
<ul style="list-style-type: none"> <li>• Simulation</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Device switchover</li> </ul>	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) <ul style="list-style-type: none"> <li>• Plastic</li> <li>• Aluminum</li> <li>• Stainless steel</li> </ul>	Yes No No
<b>Dimensions</b>	
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:** 10/09/2020