

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

Touch operation

- Design as touch screen No

Installation type/mounting

Mounting position vertical

Mounting in portrait format possible No

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 I²t 0.5 A²·s

Power

Active power input, typ.	3 W
Processor	
Processor type	RISC 32 bit
Memory	
Flash	Yes
RAM	Yes
Memory available for user data	1 Mbyte
Type of output	
Acoustics	
• Buzzer	No
• Speaker	No
Time of day	
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	
Diagnostic messages	
• Diagnostic information readable	No
EMC	
Emission of radio interference acc. to EN 55 011	
• Limit class A, for use in industrial areas	Yes
• Limit class B, for use in residential areas	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
Use in hazardous areas	
• ATEX Zone 2	No
• ATEX Zone 22	No
• cULus Class I Zone 1	No
• cULus Class I Zone 2, Division 2	Yes
• FM Class I Division 2	No
Marine approval	
• Germanischer Lloyd (GL)	Yes
• American Bureau of Shipping (ABS)	Yes
• Bureau Veritas (BV)	Yes
• Det Norske Veritas (DNV)	Yes
• Lloyds Register of Shipping (LRS)	Yes
• Nippon Kaiji Kyokai (Class NK)	Yes
• Polski Rejestr Statkow (PRS)	No
Ambient conditions	
Ambient temperature during operation	
• 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, min.	40 °C

Ambient temperature during storage/transportation

● min.	-20 °C
● max.	60 °C

Relative humidity

● Operation, max.	90 %; no condensation
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Operating systems

proprietary	Yes
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pre-installed operating system

● Windows CE	No
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Configuration

Message indicator	Yes
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Alarm system (incl. buffer and acknowledgment)	Yes
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Process value display (output)	Yes
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Process value default (input) possible	Yes
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Recipe management	Yes
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Configuration software

● STEP 7 Basic (TIA Portal)	Yes; via integrated WinCC Basic (TIA Portal)
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● STEP 7 Professional (TIA Portal)	Yes; via integrated WinCC Basic (TIA Portal)
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● WinCC flexible Compact	No
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● WinCC flexible Standard	No
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● WinCC flexible Advanced	No
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● WinCC Basic (TIA Portal)	Yes
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● WinCC Comfort (TIA Portal)	Yes
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● WinCC Advanced (TIA Portal)	Yes
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● WinCC Professional (TIA Portal)	Yes
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Languages

Online languages

● Number of online/runtime languages	5
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Project languages

● Languages per project	32
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Functionality under WinCC (TIA Portal)

Libraries	Yes
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Task planner

● time-controlled	No
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● task-controlled	Yes
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Help system	Yes
● 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

Image objects

● 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

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
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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	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