

SIMATIC HMI KP400 BASIC COLOR PN, BASIC PANEL, KEY OPERATION, 4" WIDESCREEN-TFT-DISPLAY, 256 COLORS, PROFINET INTERFACE, CONFIGURATION FROM WINCC BASIC V11 SP2/ STEP 7 BASIC V11 SP2, CONTAINS OPEN SOURCE SW WHICH IS PROVIDED FREE OF CHARGE FOR DETAILS SEE CD



Product type designation

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
• Vertical image resolution	272

Backlighting

• MTBF backlighting (at 25 °C)	50 000 h
• Dimmable backlight	No

Control elements

Keyboard

• Number of function keys	8
• Keys with LED	No
• System keys	Yes; 26
• Numeric/alphabetical input	

— Numeric keyboard	Yes; Keyboard
— Alphanumeric keyboard	Yes; similar to mobile phone
Touch operation	
• Design as touch screen	No
Installation type/mounting	
Mounting in portrait format possible	No
Mounting in landscape format possible	Yes
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
Inrush current A ² s	0.5 A ² s
Power	
Power consumption, typ.	2 W
Memory	
Flash	Yes
RAM	Yes
Usable memory for user data	1 Mbyte
Type of output	
Acoustics	
• Buzzer	No
• Speaker	No
Time of day	
Clock	
• Hardware clock (real-time clock)	No
• Software clock	Yes
• Battery-backed	No
• Synchronizable	Yes
Interfaces	
Number of RS 485 interfaces	0
Number of USB interfaces	0
Number of SD card slots	0
Number of parallel interfaces	0
Number of 20 mA interfaces (TTY)	0
Number of RS 232 interfaces	0
Number of RS 422 interfaces	0
Number of other interfaces	0
With software interfaces	No

Industrial Ethernet	
• Number of industrial Ethernet interfaces	1
• Industrial Ethernet status LED	2
Protocols	
PROFINET	Yes
PROFINET IO	No
IRT supported	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
• MODBUS	Yes; Modicon (MODBUS TCP/IP)
• Supports protocol for EtherNet/IP	Yes
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
KC approval	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
Marine approval	
• Germanischer Lloyd (GL)	No
• American Bureau of Shipping (ABS)	No
• Bureau Veritas (BV)	No
• Det Norske Veritas (DNV)	No
• Lloyds Register of Shipping (LRS)	No

• Nippon Kaiji Kyokai (Class NK)	No
• Polski Rejestr Statkow (PRS)	No
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	No
• FM Class I Division 2	No
Ambient conditions	
Mounting position	vertical
maximum permissible angle of inclination without external ventilation	35°
Operating temperature	
• Operation (vertical installation)	
— in vertical mounting position, minimum	0 °C
— in vertical mounting position, maximum	50 °C
• Operation (max. tilt angle)	
— at maximum tilt angle, minimum	0 °C
— at maximum tilt angle, maximum	40 °C
Storage/transport temperature	
• Min.	-20 °C
• max.	60 °C
Relative humidity	
• Operation, max.	90 %
Operating systems	
proprietary	Yes
Executable with configuration operating system	
• other	No
Configuration	
Message indicator	Yes
With alarm logging system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes
Recipe administration	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

Online languages

- Number of online/runtime languages 5

Languages

- Languages per project 32
- Languages
 - D Yes
 - GB Yes
 - F Yes
 - I Yes
 - E Yes
 - Chinese traditional Yes
 - Chinese simplified Yes
 - DK Yes
 - FIN Yes
 - GR Yes
 - J Yes
 - KP / ROK Yes
 - NL Yes
 - N Yes
 - PL Yes
 - P Yes
 - RUS Yes
 - S Yes
 - CZ Yes
 - SK Yes
 - TR Yes
 - H Yes

Functionality under WinCC (TIA Portal)

Libraries Yes

Task planner

- time-controlled No
- task-controlled Yes

Help system Yes

- Number of characters per info text 320

Message system

- Number of alarm classes 32
- Number of bit messages 200
- 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 administration	
• 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	500
• Number of variables per screen	30
• Limit values	Yes
• Multiplexing	Yes
• Structs	No
• Arrays	Yes
Images	
• Number of configurable images	50
• Permanent window/default	Yes; No permanent window can be configured
• Global image	Yes
• Start screen configurable	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 view	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	
— US American (English)	Yes
• Character sets	
— Tahoma	Yes
— Arial	No
— Courier New	No
— WinCC flexible Standard	Yes
— Ideographic languages	Yes
• Font size freely scalable	No
• Additional character sets can be loaded	No
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
- Win AC 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

- Clean screen No
- Touch calibration No
- Backup/restore Yes
- Backup/Restore automatically No
- Simulation Yes
- Device switchover Yes
- Delta transfer No

I/O / Options

I/O devices

- Printer No
- MultiMediaCard No
- SD card No
- USB memory No

Mechanics/material

Type of housing (front)

- plastic Yes
- aluminum No
- Stainless steel No

Dimensions

Width of the housing front	162 mm
Height of housing front	189 mm
Mounting cutout/device depth (W x H x T)	
• Mounting cutout, width	135 mm
• Mounting cutout, height	171 mm
Device depth	33 mm

Weights

Without packaging

With packaging

last modified:

0.51 kg

0.66 kg

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