

SIMATIC HMI KTP400F MOBILE WITH INTEG. ENABLING BUTTON, EMERGENCY STOP, TOUCH AND KEY OPERATION, 4" WIDESCREEN-TFT-DISPLAY, PROFINET INTERFACE, CONFIGURABLE FROM WINCC COMFORT V13 SP1 WITH HSP



General information

Product type designation	SIMATIC HMI KTP400F Mobile
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Display

Design of display	TFT
Screen diagonal	4.3 in
Number of colors	16 000 000
Resolution (pixels)	

- Horizontal image resolution 480 Pixel
- Vertical image resolution 272 Pixel

Backlighting

- MTBF backlighting (at 25 °C) 50 000 h
- Backlight dimmable Yes; 0-100 %

Control elements

Keyboard fonts

- Function keys
 - Number of function keys 4
- Keys with LED Yes
- System keys No

- Numeric/alphabetical input - Numeric keyboard - alphanumeric keyboard	Yes; Onscreen keyboard Yes; Onscreen keyboard
Special operator controls	
Stop button (forced blocking)	Yes
Emergency stop button (forced blocking)	No
Emergency stop button (illuminated and forced blocking)	Yes
Acknowledgement button (3-stage)	Yes
Key-operated switch	No
Illuminated pushbutton	Yes
Camera	
integrated camera	No
Expansions for operator control of the process	
- DP direct LEDs (LEDs as S7 output I/O) - F1...Fx	4
- Direct keys (keys as S7 input I/O) - F1...Fx	4
Direct keys (touch buttons as S7 input I/O)	32
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)	210 mA
Starting current inrush I^2t	0.37 A ² ·s
Power	
Power consumption, typ.	5 W
Processor	
Processor type	ARM
Memory	
Flash	Yes
RAM	Yes
Memory available for user data	4 Mbyte
Type of output	
Power LED	No
LED for safe	No
LED for communication	No
LED for battery	No

Vibrations	No
Time of day	
Clock	
• retentive	Yes
• synchronizable	Yes
Interfaces	
Number of industrial Ethernet interfaces	1
Number of PROFINET interfaces	1
Number of RS 485 interfaces	0
Number of USB interfaces	1; USB 2.0
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 wireless interfaces	0
Number of SD card slots	0
With software interfaces	No
Protocols	
PROFINET	Yes
Supports protocol for PROFINET IO	Yes
PROFIsafe	Yes
PROFIBUS	No
MPI	No
Protocols (Ethernet)	
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
WEB characteristics	
• HTTP	Yes
• HTTPS	Yes
• HTML	Yes
• XML	No
• CSS	Yes
• Active X	No
• JavaScript	Yes
• Java VM	No
Further protocols	
• MODBUS	Yes

• EtherNet/IP	Yes
• other bus systems	No
Communication functions	
Wireless communication	
• supported standards	
— Radio standard WLAN 802.11	No
— Bluetooth radio standard	No
Interrupts/diagnostics/status information	
Diagnostic messages	
• Diagnostic information readable	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	
IP65 (all-round)	Yes
Standards, approvals, certificates	
CE mark	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	No; Available soon
Suitable for safety functions	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
Highest safety class achievable in safety mode	
• Performance level according to EN ISO 13849-1:2008	PL _e
• SIL acc. to IEC 61508	SIL 3
Use in hazardous areas	
• ATEX Zone 2	No
• ATEX Zone 22	No
• IECEx Zone 2	No
• IECEx Zone 22	No
• cULus Class I Zone 1	No

- cULus Class I Zone 2, Division 2
- FM Class I Division 2

No

No

Ambient conditions

Free fall

- Fall height, max. 1.2 m

Ambient temperature during operation

- min. 0 °C
- max. 45 °C

Ambient temperature during storage/transportation

- min. -20 °C
- max. 60 °C

Relative humidity

- Operation, max. 90 %

Operating systems

proprietary No

pre-installed operating system

- Windows CE Yes

Configuration

Message indicator Yes

Alarm logging system (incl. buffer and acknowledgment) Yes

Process value display (output) Yes

Process value default (input) possible Yes

Configuration software

- STEP 7 Basic (TIA Portal) No
- STEP 7 Professional (TIA Portal) No
- WinCC flexible Compact No
- WinCC flexible Standard No
- WinCC flexible Advanced No
- WinCC Basic (TIA Portal) No
- WinCC Comfort (TIA Portal) Yes
- WinCC Advanced (TIA Portal) Yes
- WinCC Professional (TIA Portal) Yes

Languages

Online languages

- Number of online/runtime languages 32

Project languages

- Languages per project 32

Functionality under WinCC (TIA Portal)

Libraries Yes

Applications/options	
• Web browser	Yes
• Pocket Word	No
• Pocket Excel	No
• PDF Viewer	Yes
• Media Player	No
• SIMATIC WinCC Sm@rtServer	Yes
• SIMATIC WinCC Audit	Yes
Number of Visual Basic Scripts	Yes
Task planner	
• time-controlled	Yes
• task-controlled	Yes
Help system	
• Number of characters per info text	500
Multiproject	
• Number of projects (internal)	0
• Number of projects (external)	0
Message system	
• Number of alarm classes	32
• Bit messages	
— Number of bit messages	4 000
• Analog messages	
— Number of analog messages	200
• S7 alarm number procedure	Yes
• System messages HMI	Yes
• System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)	Yes
• Number of characters per message	80
• Number of process values per message	8
• Acknowledgment groups	Yes
• Message indicator	Yes
• Message buffer	
— Number of entries	1 024
— Circulating buffer	Yes
— retentive	Yes
— maintenance-free	Yes
Recipe administration	
• Number of recipes	300
• Data records per recipe	500
• Entries per data record	1 000
• Size of internal recipe memory	2 Mbyte
• Recipe memory expandable	Yes

Variables	
• Number of variables per device	2 048
• Number of variables per screen	50
• Limit values	Yes
• Multiplexing	Yes
• Structures	Yes
• Arrays	Yes
Images	
• Number of configurable images	500
• Permanent window/default	Yes
• Global image	Yes
• Pop-up images	Yes
• Slide-in images	Yes
• Image selection by PLC	Yes
• Image number in the PLC	Yes
Image objects	
• Number of objects per image	50
• 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
• 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	Yes
• Sm@rtClient view	Yes
• Recipe view	Yes
• f(x) trend view	Yes
• System diagnostics view	Yes
• Media Player	No
• HTML browser	No
• PDF display	No
• IP camera display	Yes
• Bar graphs	Yes

• Sliders	Yes
• Pointer instruments	Yes
• Analog/digital clock	Yes
Lists	
• Number of text lists per project	500
• Number of entries per text list	500
• Number of graphics lists per project	500
• Number of entries per graphics list	500
Archiving	
• Number of archives per device	50
• Number of entries per archive	20 000
• Message archive	Yes
• Process value archive	Yes
• Archiving methods	
— Sequential archive	Yes
— Short-term archive	Yes
• Memory location	
— Memory card	No
— USB memory	Yes
— Ethernet	Yes
• Data storage format	
— CSV	Yes
— TXT	No
— RDB	Yes
Security	
• Number of user groups	50
• Number of user rights	32
• Number of users	50
• Password export/import	Yes
• SIMATIC Logon	Yes
Logging through printer	
• Alarms	Yes
• Report (shift log)	Yes
• Hardcopy	Yes
• Electronic print to file	No
Character sets	
• Keyboard fonts	
— US English	Yes
Transfer (upload/download)	
• MPI/PROFIBUS DP	No
• USB	No

• Ethernet	Yes
• Wireless LAN	No
• using external storage medium	Yes; Backup/restore
Process coupling	
• S7-1200	Yes
• S7-1500	Yes
• S7-200	Yes
• S7-300/400	Yes
• LOGO!	Yes
• WinAC	Yes; WinAC RTX
• SINUMERIK	Yes
• SIMOTION	Yes
• 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
• OPC UA Client	Yes
• OPC UA Server	Yes
Service tools/configuration aids	
• Backup/Restore manually	Yes
• Backup/Restore automatically	No
• Simulation	Yes
• Device switchover	Yes
Peripherals/Options	
Peripherals	
• Printer	Yes
• SIMATIC HMI MM memory card: Multi Media Card	No
• SIMATIC HMI SD memory card: Secure Digital memory card	No
• SIMATIC HMI CF memory card Compact Flash Card	No
• USB memory	Yes
• SIMATIC IPC USB Flashdrive (USB stick)	Yes
• SIMATIC HMI USB stick	Yes
• Network camera	Yes
Additional software components loadable	Yes; SIMATIC options

Mechanics/material

Enclosure material (front)

- Plastic
- Aluminum
- Stainless steel

Yes

No

No

Dimensions

Width of the housing front

194 mm

Weights

Weight without packaging

0.7 kg

Weight incl. packaging

0.95 kg

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