

SIMATIC HMI KTP700F MOBILE, 7.0" TFT DISPLAY, 800 X 480 PIXELS, 16M COLOR, KEY AND TOUCH OPERATION, 8 FUNCTION KEYS, 1 X PROFINET/INDUSTRIAL, ETHERNET INTERFACE; 1 X MULTIMEDIA CARD, 1 X USB, ACKNOWLEDGEMENT SWITCH, EMERGENCY-STOP BUTTON, CONFIGURABLE FROM WINCC COMFORT V13 SP1



General information	
Product type designation	SIMATIC HMI KTP700F Mobile
Display	
Design of display	TFT widescreen display, LED backlighting
Screen diagonal	7 in
Number of colors	16 777 216
Resolution (pixels)	
• Horizontal image resolution	800 Pixel
• Vertical image resolution	480 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	8
• Keys with LED	Yes
• System keys	No

<ul style="list-style-type: none"> <li>• Numeric/alphabetical input               <ul style="list-style-type: none"> <li>— Numeric keyboard</li> <li>— alphanumeric keyboard</li> </ul> </li> </ul>	<p>Yes; Onscreen keyboard</p> <p>Yes; Onscreen keyboard</p>
<b>Touch operation</b>	
<ul style="list-style-type: none"> <li>• Design as touch screen</li> <li>• Design as multitouch screen</li> </ul>	<p>Yes</p> <p>No</p>
<b>Special operator controls</b>	
<ul style="list-style-type: none"> <li>• Stop button (forced blocking)</li> <li>• Emergency stop button (forced blocking)</li> <li>• Emergency stop button (illuminated and forced blocking)</li> <li>• Acknowledgement button (3-stage)</li> <li>• Key-operated switch</li> <li>• Illuminated pushbutton</li> </ul>	<p>Yes</p> <p>No</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>
<b>Camera</b>	
<ul style="list-style-type: none"> <li>• integrated camera</li> </ul>	No
<b>Expansions for operator control of the process</b>	
<ul style="list-style-type: none"> <li>• DP direct LEDs (LEDs as S7 output I/O)               <ul style="list-style-type: none"> <li>— F1...Fx</li> </ul> </li> <li>• Direct keys (keys as S7 input I/O)               <ul style="list-style-type: none"> <li>— F1...Fx</li> </ul> </li> <li>• Direct keys (touch buttons as S7 input I/O)</li> </ul>	<p>8</p> <p>8</p> <p>32</p>
<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)	350 mA
Starting current inrush I <sup>2</sup> t	0.135 A <sup>2</sup> ·s
<b>Power</b>	
Power consumption, typ.	8.5 W
<b>Processor</b>	
Processor type	ARM
<b>Memory</b>	
Flash	Yes
RAM	Yes
Memory available for user data	12 Mbyte
<b>Type of output</b>	
Power LED	No

LED for safe	No
LED for communication	No
LED for battery	No
Vibrations	No

### Time of day

Clock	
• Hardware clock (real-time clock)	Yes
• Software clock	No
• 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 SD card slots	1
With software interfaces	No

### WLAN

• Number of wireless interfaces	0
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### 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
<b>Further protocols</b>	
• MODBUS	Yes
• EtherNet/IP	Yes
• other bus systems	No
<b>Communication functions</b>	
<b>Wireless communication</b>	
• supported standards	
— Radio standard WLAN 802.11	No
— Bluetooth radio standard	No
<b>Interrupts/diagnostics/status information</b>	
<b>Diagnostic messages</b>	
• Diagnostic information readable	Yes
<b>EMC</b>	
<b>Emission of radio interference acc. to EN 55 011</b>	
• Limit class A, for use in industrial areas	Yes
• Limit class B, for use in residential areas	No
<b>Degree and class of protection</b>	
IP65 (all-round)	Yes
<b>Standards, approvals, certificates</b>	
CE mark	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
Suitable for safety functions	Yes
<b>Marine approval</b>	
• 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
<b>Highest safety class achievable in safety mode</b>	
• Performance level according to EN ISO 13849-1:2008	PLe
• 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	No
• FM Class I Division 2	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
Recipe administration	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
<b>Recipe administration</b>	
• 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
<b>Variables</b>	
• Number of variables per device	2 048
• Number of variables per screen	400
• Limit values	Yes
• Multiplexing	Yes
• Structures	Yes
• Arrays	Yes
<b>Images</b>	
• Number of configurable images	500
• 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	400
• 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
<b>Complex image objects</b>	
• Number of complex objects per screen	20
• 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
• Bar graphs	Yes
• Sliders	Yes
• Pointer instruments	Yes
• Analog/digital clock	Yes
<b>Lists</b>	
• 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
<b>Archiving</b>	
• 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	Yes
— USB memory	Yes
— Ethernet	Yes
• Data storage format	
— CSV	Yes
— TXT	No
— RDB	Yes
<b>Security</b>	
• Number of user groups	50
• Number of user rights	32
• Number of users	50
• Password export/import	Yes
• SIMATIC Logon	Yes
<b>Logging through printer</b>	
• Alarms	Yes
• Report (shift log)	Yes
• Hardcopy	No
• Electronic print to file	No
<b>Character sets</b>	
• 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; without NC channel
• 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	Yes
• Simulation	Yes
• Device switchover	Yes
Peripherals/Options	
Peripherals	
• Printer	Yes
• SIMATIC HMI MM memory card: Multi Media Card	Yes
• SIMATIC HMI SD memory card: Secure Digital memory card	Yes
• USB memory	Yes
• Network camera	Yes
Additional software components loadable	Yes; SIMATIC options
Mechanics/material	

Enclosure material (front)	
• Plastic	Yes
• Aluminum	No
• Stainless steel	No

### Dimensions

Width of the housing front	248.4 mm
Height of housing front	194.9 mm

### Weights

Weight without packaging	1.3 kg
Weight incl. packaging	1.4 kg

**last modified:** 08.01.2016