

SIMATIC HMI KTP700F Mobile HW, 7.0" TFT display, 800 x 480 pixel, 16m colors key and touch operation, 6 function keys, 2 illuminated push-buttons, 1x PROFINET/Industrial Ethernet interface, 1x multimedia card, 1x USB, Key-operated switch, acknowledgement switch, emergency stop/stop button configurable from WinCC Comfort V15, handwheel



General information	
Product type designation	KTP700F
Display	
Design of display	TFT widescreen display, LED backlighting
Screen diagonal	7 in
Color display	Yes
Number of colors	16 777 216
Resolution (pixels)	
<ul style="list-style-type: none"> <li>Horizontal image resolution</li> </ul>	800 pixel
<ul style="list-style-type: none"> <li>Vertical image resolution</li> </ul>	480 pixel
Backlighting	
<ul style="list-style-type: none"> <li>MTBF backlighting (at 25 °C)</li> </ul>	50 000 h
<ul style="list-style-type: none"> <li>Backlight dimmable</li> </ul>	Yes; 0-100 %
Control elements	
Keyboard fonts	
<ul style="list-style-type: none"> <li>Function keys                             <ul style="list-style-type: none"> <li>Number of function keys</li> <li>Number of function keys with LEDs</li> </ul> </li> <li>Keys with LED</li> <li>Numeric keyboard</li> <li>alphanumeric keyboard</li> </ul>	6 6 Yes Yes; Onscreen keyboard Yes; Onscreen keyboard
Touch operation	
<ul style="list-style-type: none"> <li>Design as touch screen</li> <li>Design as multi-touch screen</li> </ul>	Yes No
Special operator controls	
<ul style="list-style-type: none"> <li>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> <li>Handwheel</li> </ul>	Yes Yes Yes Yes Yes Yes
Camera	
<ul style="list-style-type: none"> <li>integrated camera</li> </ul>	No
Expansions for operator control of the process	
<ul style="list-style-type: none"> <li>Direct keys (touch buttons as S7 input I/O)</li> </ul>	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
<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
<b>Time of day</b>	
Clock	
<ul style="list-style-type: none"> <li>• Hardware clock (real-time)</li> <li>• retentive</li> <li>• synchronizable</li> </ul>	 Yes Yes Yes
<b>Interfaces</b>	
Number of industrial Ethernet interfaces	1
Number of PROFINET interfaces	1
Number of RS 485 interfaces	0
Number of RS 422 interfaces	0
Number of RS 232 interfaces	0
Number of USB interfaces	1; USB 2.0
Number of wireless interfaces	0
Number of SD card slots	1
<b>Protocols</b>	
PROFINET	Yes
Supports protocol for PROFINET IO	Yes
PROFIsafe	Yes
PROFIBUS	No
EtherNet/IP	Yes
MPI	No
Protocols (Ethernet)	
<ul style="list-style-type: none"> <li>• TCP/IP</li> <li>• DHCP</li> <li>• SNMP</li> <li>• DCP</li> <li>• LLDP</li> </ul>	 Yes Yes Yes Yes Yes
WEB characteristics	
<ul style="list-style-type: none"> <li>• HTTP</li> <li>• HTTPS</li> <li>• HTML</li> <li>• XML</li> <li>• CSS</li> <li>• Active X</li> <li>• JavaScript</li> <li>• Java VM</li> </ul>	 Yes Yes Yes No Yes No Yes No
Further protocols	
<ul style="list-style-type: none"> <li>• MODBUS</li> <li>• other bus systems</li> </ul>	 Yes No
<b>communication functions / header</b>	
Wireless communication	
<ul style="list-style-type: none"> <li>• supported standards <ul style="list-style-type: none"> <li>— Radio standard WLAN 802.11</li> <li>— Bluetooth radio standard</li> </ul> </li> </ul>	 No No
<b>Degree and class of protection</b>	
IP65 (all-round)	Yes
<b>Standards, approvals, certificates</b>	

CE mark	Yes
UL approval	Yes
cULus	Yes
FM approval	No
RCM (formerly C-TICK)	Yes
KC approval	No
EAC (formerly Gost-R)	Yes
Suitable for safety functions	Yes
Marine approval	No
<b>Highest safety class achievable in safety mode</b>	
• Performance level according to ISO 13849-1	PLe
• SIL acc. to IEC 61508	SIL 3
<b>Use in hazardous areas</b>	
• 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
• cULus Class II Division 2	No
• FM Class I Division 2	No
• FM Class II Division 2	No
<b>Marine approval</b>	
• Germanischer Lloyd (GL)	Yes
• Polski Rejestr Statkow (PRS)	No
<b>Ambient conditions</b>	
<b>Free fall</b>	
• Fall height, max.	1.2 m
<b>Ambient temperature during operation</b>	
• min.	0 °C
• max.	45 °C
<b>Ambient temperature during storage/transportation</b>	
• min.	-20 °C
• max.	60 °C
<b>Relative humidity</b>	
• Operation, max.	90 %
<b>Operating systems</b>	
<b>pre-installed operating system</b>	
• Windows CE	Yes
<b>configuration / header</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)	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
<b>Languages</b>	
<b>Online languages</b>	
• Number of online/runtime languages	32
<b>Project languages</b>	

• Languages per project	32
<b>Functionality under WinCC (TIA Portal)</b>	
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
<b>Multiproject</b>	
• Number of projects (internal)	0
• Number of projects (external)	0
<b>Message system</b>	
• 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 event, more (SIMATIC S7, SINUMERIK, SIMOTION, ... )	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 management</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	Yes
• 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
• Electronic print to file	Yes; PDF, HTML
<b>Character sets</b>	
• Keyboard fonts	
— US English	Yes
<b>Transfer (upload/download)</b>	
• MPI/PROFIBUS DP	No
• USB	No

• Ethernet	Yes
• Wireless LAN	No
• using external storage medium	No
<b>Process coupling</b>	
• S7-1200	Yes
• S7-1500	Yes
• S7-200	Yes
• S7-300/400	Yes
• LOGO!	Yes
• WinAC	No
• SINUMERIK	Yes
• SIMOTION	Yes
• Allen Bradley (EtherNet/IP)	Yes
• Allen Bradley (DF1)	No
• Mitsubishi (MC TCP/IP)	Yes
• Mitsubishi (FX)	No
• OMRON (FINS TCP)	Yes
• OMRON (LINK/Multilink)	No
• Modicon (Modbus TCP/IP)	Yes
• Modicon (Modbus)	No
<b>Service tools/configuration aids</b>	
• Backup/Restore manually	Yes
• Backup/Restore automatically	Yes
• Simulation	Yes
• Device switchover	Yes
<b>Peripherals/Options</b>	
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
<b>Mechanics/material</b>	
Enclosure material (front)	
• Plastic	Yes
• Aluminum	No
• Stainless steel	No
<b>Dimensions</b>	
Width of the housing front	248.4 mm
Height of housing front	171.7 mm
<b>Weights</b>	
Weight (without packaging)	1.3 kg
Weight (with packaging)	1.8 kg
<b>last modified:</b>	9/20/2021 