

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)	
• 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	6
— Number of function keys with LEDs	6
• Keys with LED	Yes
• Numeric keyboard	Yes; Onscreen keyboard
• alphanumeric keyboard	Yes; Onscreen keyboard
Touch operation	
• Design as touch screen	Yes
• Design as multi-touch screen	No
Special operator controls	
• Stop button (forced blocking)	Yes
• Emergency stop button (illuminated and forced blocking)	Yes
• Acknowledgement button (3-stage)	Yes
• Key-operated switch	Yes
• Illuminated pushbutton	Yes
• Handwheel	Yes
Camera	
• integrated camera	No
Expansions for operator control of the process	
• DP direct LEDs (LEDs as S7 output I/O)	
— F1...Fx	6
• Direct keys (keys as S7 input I/O)	
— F1...Fx	6
• 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
Memory	
Flash	Yes
RAM	Yes
Memory available for user data	12 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	
<ul style="list-style-type: none"> <li>• Hardware clock (real-time)</li> <li>• retentive</li> <li>• synchronizable</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> <li>Yes</li> </ul>
Interfaces	
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
Protocols	
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>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>Yes</li> </ul>
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>	<ul style="list-style-type: none"> <li>Yes</li> <li>Yes</li> <li>Yes</li> <li>No</li> <li>Yes</li> <li>No</li> <li>Yes</li> <li>No</li> </ul>
Further protocols	
<ul style="list-style-type: none"> <li>• MODBUS</li> <li>• other bus systems</li> </ul>	<ul style="list-style-type: none"> <li>Yes</li> <li>No</li> </ul>
Communication functions	
Wireless communication	
<ul style="list-style-type: none"> <li>• supported standards <ul style="list-style-type: none"> <li>— Radio standard WLAN 802.11</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>No</li> </ul>

— Bluetooth radio standard	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</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

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 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
Recipe management	
• 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	400
• Limit values	Yes
• Multiplexing	Yes
• Structures	Yes
• Arrays	Yes
Images	
• 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

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		No	
Process coupling			
• 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	
Service tools/configuration aids			
• Backup/Restore manually		Yes	
• Backup/Restore automatically		Yes	
• Simulation		Yes	
• Device switchover		Yes	
Peripherals/Options			
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	
Weights			
Weight (without packaging)		1.3 kg	
Weight (with packaging)		1.8 kg	
Classifications			
		Version	Classification
	eClass	14	27-33-02-02
	eClass	12	27-33-02-02
	eClass	9.1	27-33-02-02
	eClass	9	27-33-02-02
	eClass	8	27-24-23-03
	eClass	7.1	27-24-23-03
	eClass	6	27-24-23-03
	ETIM	10	EC001427
	ETIM	9	EC001427

ETIM	8	EC001427
ETIM	7	EC001427
IDEA	4	6607
UNSPSC	15	43-21-15-06

**Approvals / Certificates**

**General Product Approval**

[Manufacturer Declaration](#)



General Product Approval	EMV	Functional Safety		other	
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