



SIMATIC HMI KTP700 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, CONFIGURABLE FROM WINCC COMFORT V13 SP1

Product type designation	
Display	
Screen diagonal	7 in
Number of colors	16 000 000
Resolution (pixels)	
• Horizontal image resolution	800 Pixel
• Vertical image resolution	480 Pixel
Backlighting	
• MTBF backlighting (at 25 °C)	50 000 h
• Backlight dimmable	Yes
Control elements	
Keyboard	
• Function keys	
— Number of function keys	8
• Keys with LED	Yes
• System keys	No
• Numeric/alphabetical input	
— Numeric keyboard	Yes
— alphanumeric keyboard	Yes
Touch operation	
• Design as touch screen	Yes
• Design as multitouch screen	No
Special operator controls	
• Stop button (forced blocking)	No

• Emergency stop button (forced blocking)	No
• Emergency stop button (illuminated and forced blocking)	No
• Acknowledgement button (3-stage)	No
• 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	8
• Direct keys (keys as S7 input I/O) — F1...Fx	8
• 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)	350 mA
Starting current inrush I^2t	0.135 A ² ·s
Power	
Power consumption, typ.	8.5 W
Memory	
Flash	Yes
RAM	Yes
usable memory 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	
• Hardware clock (real-time clock)	Yes
• Software clock	No
• battery-backed	Yes
• synchronizable	Yes

Interfaces	
Number of RS 485 interfaces	0
Number of USB interfaces	1
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
PROFINET IO	
• Number of PROFINET interfaces	1
Industrial Ethernet	
• Number of industrial Ethernet interfaces	1
WLAN	
• Number of wireless interfaces	0
Protocols	
PROFINET	Yes
PROFINET IO	Yes
PROFIsafe	No
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	Yes	
Suitable for safety functions	No	
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	
• 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	
pre-installed operating system	
• Windows CE	Yes
proprietary	No
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
• Project 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
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	400
• Limit values	Yes
• Multiplexing	Yes
• Structures	Yes
• Arrays	Yes
Images	
• Number of configurable images	500
• Permanent window/default	Yes
• 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	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
Complex image objects	
• 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
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	Yes
— 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	No
• Electronic print to file	No
Character sets	
• Keyboard	
— US American (English)	Yes
• Fonts	
— Tahoma	Yes
— Arial	Yes
— Courier New	Yes
— WinCC Standard	Yes
— Ideographic languages	Yes
• Font size freely scalable	Yes
• additional character sets loadable	Yes
Transfer (upload/download)	
• MPI/PROFIBUS DP	No
• USB	No
• Ethernet	Yes
• Wireless LAN	No
• using external storage medium	Yes
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)	No
• OMRON (LINK/Multilink)	No
• Modicon (Modbus TCP/IP)	Yes

• Modicon (Modbus)	No
Service tools/configuration aids	
• Clean screen	Yes
• Touch calibration	Yes
• Backup/Restore manually	Yes
• Backup/Restore automatically	Yes
• Simulation	Yes
• Device switchover	Yes
• Delta transfer	No
Peripherals/Options	
Peripherals	
• Printer	Yes
• MultiMediaCard	Yes
• SD card	Yes
• USB memory	Yes
• Network camera	Yes
Additional software components loadable	Yes
Mechanics/material	
Type of housing (front)	
• plastic	Yes
• aluminum	No
• Stainless steel	No
Dimensions	
Width of the housing front	248.4 mm
Height of housing front	171.7 mm
Weights	
Without packaging	1.2 kg
With packaging	1.3 kg
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