

SIMATIC HMI KTP900 Mobile, 9.0" TFT display, 800x 480 pixel, 16 million colors. key and touch operation, 10 function keys, 1x PROFINET/Industrial Ethernet interface, 1x multimedia card, 1x USB, configurable from WinCC Comfort V13 SP1



General information	
Product type designation	KTP900 Mobile
Display	
Design of display	TFT widescreen display, LED backlighting
Screen diagonal	9 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	10
— Number of function keys with LEDs	10
• 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)	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	10
• Direct keys (keys as S7 input I/O)	
— F1...Fx	10
• 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)	450 mA
Starting current inrush I ² t	0.135 A ² ·s
Power	
Active power input, typ.	11 W
Processor	
Processor type	ARM
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	
• Hardware clock (real-time)	Yes
• retentive	Yes
• synchronizable	Yes
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	No
PROFIBUS	No
EtherNet/IP	Yes
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
• other bus systems	No
communication functions / header	

Wireless communication	
<ul style="list-style-type: none"> • supported standards <ul style="list-style-type: none"> — Radio standard WLAN 802.11 — Bluetooth radio standard 	 No No
Interrupts/diagnostics/status information	
Diagnoses	
<ul style="list-style-type: none"> • Diagnostic information readable 	Yes
EMC	
Emission of radio interference acc. to EN 55 011	
<ul style="list-style-type: none"> • Limit class A, for use in industrial areas • Limit class B, for use in residential areas 	 Yes 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	Yes
Highest safety class achievable in safety mode	
<ul style="list-style-type: none"> • Performance level according to ISO 13849-1 • SIL acc. to IEC 61508 	 none No
Use in hazardous areas	
<ul style="list-style-type: none"> • ATEX Zone 2 • ATEX Zone 22 • IECEx Zone 2 • IECEx Zone 22 • cULus Class I Zone 1 • cULus Class I Zone 2, Division 2 • FM Class I Division 2 	 No No No No No No No
Marine approval	
<ul style="list-style-type: none"> • Germanischer Lloyd (GL) • American Bureau of Shipping (ABS) • Bureau Veritas (BV) • Det Norske Veritas (DNV) • Korean Register of Shipping (KRS) • Lloyds Register of Shipping (LRS) • Nippon Kaiji Kyokai (Class NK) • Polski Rejestr Statkow (PRS) • Chinese Classification Society (CCS) 	 Yes Yes No Yes No Yes Yes No No
Ambient conditions	
Free fall	
<ul style="list-style-type: none"> • Fall height, max. 	1.2 m
Ambient temperature during operation	
<ul style="list-style-type: none"> • min. • max. 	 0 °C 45 °C
Ambient temperature during storage/transportation	
<ul style="list-style-type: none"> • min. • max. 	 -20 °C 60 °C
Relative humidity	
<ul style="list-style-type: none"> • Operation, max. 	90 %
Operating systems	
pre-installed operating system	
<ul style="list-style-type: none"> • Windows CE 	Yes
configuration / header	
Message indicator	Yes
Alarm system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes

Recipe management	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 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

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 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)	Yes		
• 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			
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)	1.5 kg		
Weight (with packaging)	1.6 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	9	EC001427
ETIM	8	EC001427
ETIM	7	EC001427
IDEA	4	6607
UNSPSC	15	43-21-15-06

Approvals / Certificates

General Product Approval	EMV	For use in hazardous locations
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For use in hazardous locations	Functional Safety	Environment	Industrial Communication
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[CCC-Ex](#)

[Type Examination Certificate](#)



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last modified:

3/12/2024