6AV2125-2DB23-0AX0

Data sheet



SIMATIC HMI KTP400F Mobile with integrated acknowledgement button, emergency switching-off switch, Touch and Key operation, 4" widescreen TFT display, PROFINET interface, configurable from WinCC Comfort V13 SP1 with HSP

General information	
Product type designation	KTP400F Mobile
Display	
Design of display	TFT
Screen diagonal	4.3 in
Color display	Yes
Number of colors	16 777 216
Resolution (pixels)	
 Horizontal image resolution 	480 pixel
 Vertical image resolution 	272 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 	4
 Number of function keys with LEDs 	4
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 	No
Illuminated pushbutton	Yes
Camera	
integrated camera	No
Expansions for operator control of the process	
 Direct keys (touch buttons as S7 input I/O) 	32
Supply voltage	
Supply voltage	
Type of supply voltage	DC

permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Input current	
Current consumption (rated value)	210 mA
Starting current inrush I²t	0.37 A ² ·s
Power	
Active power input, typ.	5 W
Processor	
Processor type	ARM
Memory	
Flash	Yes
RAM	Yes
Memory available for user data	4 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 GOD Interfaces Number of wireless interfaces	0
Number of SD card slots	0
Protocols	
	Voc
PROFINET	Yes
Supports protocol for PROFINET IO	Yes
PROFIBUS PROFIBUS	Yes
	No You
EtherNet/IP MPI	Yes
Protocols (Ethernet)	No
TCP/IP	Yes
• DHCP	Yes
SNMP	Yes
• SNMP • DCP	Yes
• LLDP	Yes
WEB characteristics	100
HTTP	Yes
• HTTPS	Yes
• HTML	Yes
• XML	No
• CSS	Yes
Active X	No
JavaScript	Yes
Java VM	No No
Further protocols	110
MODBUS	Yes
	1 63

other bus systems	No
Interrupts/diagnostics/status information	140
Diagnoses	Vec
Diagnostic information readable	Yes
EMC	
Emission of radio interference acc. to EN 55 011	V
Limit class A, for use in industrial areas	Yes
Limit class B, for use in residential areas	No
Degree and class of protection	1
IP65 (all-round)	Yes
Standards, approvals, certificates	
CE mark	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	No; Available soon
Suitable for safety functions	Yes
Marine approval	Yes
Highest safety class achievable in safety mode	DI -
Performance level according to ISO 13849-1 SH and to ISO 64500.	PLe
SIL acc. to IEC 61508	SIL 3
Use in hazardous areas	AL_
• ATEX Zone 2	No No
• ATEX Zone 22	No No
• IECEx Zone 2	No No
IECEx Zone 22cULus Class I Zone 1	No No
	No No
 cULus Class I Zone 2, Division 2 FM Class I Division 2 	No No
Marine approval	NO
Germanischer Lloyd (GL)	Yes
American Bureau of Shipping (ABS)	Yes
Bureau Veritas (BV)	No; Available soon
Det Norske Veritas (DNV)	Yes
Korean Register of Shipping (KRS)	No
Lloyds Register of Shipping (LRS)	Yes
Nippon Kaiji Kyokai (Class NK)	Yes
Polski Rejestr Statkow (PRS)	No
Chinese Classification Society (CCS)	No
Ambient conditions	
Free fall	
• Fall height, max.	1.2 m
Ambient temperature during operation	1.2.11
• 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
configuration / header	
Message indicator	Yes
Alarm system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes
	. ••

Pacina management	Yes
Recipe management Configuration software	100
STEP 7 Basic (TIA Portal)	No
STEP 7 Professional (TIA Portal)	No
WinCC flexible Compact	No
WinCC flexible Standard WinCC flexible Advanced	No No
WinCC flexible Advanced (TIA Park II)	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
	Yes
Recipe memory expandable Variables	Tes
Number of variables per device	2 048
	50
Number of variables per screenLimit values	Yes
Multiplexing Structures	Yes Yes
Structures	
• Arrays	Yes
Images • Number of configurable images	500
Permanent window/default	Yes
Global image	Yes
Pop-up images	Yes
	Yes
Slide-in imagesImage selection by PLC	Yes
Image selection by FEC Image number in the PLC	Yes
Image rounder in the PEC	1 65
	50
Number of objects per imageText fields	Yes
I/O fields	Yes
Graphic I/O fields (graphics list)	Yes
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Yes
Symbolic I/O fields (text list)Date/time fields	Yes
Switches Craphic display	Yes Yes
Graphic display	Yes
• Icons	
Geometric objects Complex income abjects	Yes
Complex image objects	-
Number of complex objects per screen	5
Alarm view Translations	Yes
• Trend view	Yes
• User view	Yes
Status/control Status/control	Yes
Sm@rtClient view	Yes
Recipe view	Yes
• f(x) trend view	Yes
System diagnostics view	Yes
Media Player	No
HTML browser	No
PDF display	No
IP camera display	Yes
Bar graphs	Yes
Sliders Deigher instruments	Yes
Pointer instruments	Yes
Analog/digital clock	Yes
Lists	500
Number of text lists per project Number of cattrian part text list.	500
Number of entries per text list	500
Number of graphics lists per project	500
Number of entries per graphics list	500
Archiving	50
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	No
— USB memory	Yes
— Ethernet	Yes
Data storage format	
— CSV	Yes
— TXT	No
— RDB	Yes
Security	100
Number of user groups	50
Number of user rights	32
Number of users	50
	Yes
Password export/import	
SIMATIC Logon	Yes
Logging through printer	V
• Alarms	Yes
Report (shift log)	Yes
Hardcopy	Yes
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	
Process coupling • S7-1200	Yes
• S7-1200	Yes Yes
• S7-1200 • S7-1500	Yes
• S7-1200 • S7-1500 • S7-200	Yes Yes
S7-1200S7-1500S7-200S7-300/400	Yes Yes Yes
 S7-1200 S7-1500 S7-200 S7-300/400 LOGO! 	Yes Yes Yes Yes
 \$7-1200 \$7-1500 \$7-200 \$7-300/400 LOGO! WinAC 	Yes Yes Yes Yes Yes Yes; WinAC RTX
 \$7-1200 \$7-1500 \$7-200 \$7-300/400 LOGO! WinAC SINUMERIK 	Yes Yes Yes Yes Yes; WinAC RTX Yes; without NC channel
 \$7-1200 \$7-1500 \$7-200 \$7-300/400 LOGO! WinAC \$INUMERIK \$IMOTION 	Yes Yes Yes Yes Yes Yes; WinAC RTX Yes; without NC channel Yes
 \$7-1200 \$7-1500 \$7-200 \$7-300/400 LOGO! WinAC SINUMERIK SIMOTION Allen Bradley (EtherNet/IP) 	Yes Yes Yes Yes Yes; WinAC RTX Yes; without NC channel Yes Yes
 \$7-1200 \$7-1500 \$7-200 \$7-300/400 LOGO! WinAC SINUMERIK SIMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) 	Yes Yes Yes Yes Yes; WinAC RTX Yes; without NC channel Yes Yes Yes
 \$7-1200 \$7-1500 \$7-200 \$7-300/400 LOGO! WinAC SINUMERIK SIMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) 	Yes Yes Yes Yes Yes; WinAC RTX Yes; without NC channel Yes Yes No Yes
 S7-1200 S7-1500 S7-200 S7-300/400 LOGO! WinAC SINUMERIK SIMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) 	Yes Yes Yes Yes Yes; WinAC RTX Yes; without NC channel Yes Yes No Yes
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 S7-1200 S7-1500 S7-200 S7-300/400 LOGO! WinAC SINUMERIK SIMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) Modicon (Modbus TCP/IP) Modicon (Modbus) OPC UA Client 	Yes Yes Yes Yes; WinAC RTX Yes; without NC channel Yes Yes No No Yes No No No No Yes No Yes
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 \$7-1200 \$7-1500 \$7-200 \$7-300/400 LOGO! WinAC \$INUMERIK \$IMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) Modicon (Modbus TCP/IP) Modicon (Modbus) OPC UA Client OPC UA Server Service tools/configuration aids Backup/Restore manually Backup/Restore automatically 	Yes Yes Yes Yes; WinAC RTX Yes; without NC channel Yes Yes No No Yes No No No Yes No Yes No Yes No Yes No Yes No Yes No
 \$7-1200 \$7-1500 \$7-200 \$7-300/400 LOGO! WinAC \$INUMERIK \$IMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) Modicon (Modbus TCP/IP) Modicon (Modbus) OPC UA Client OPC UA Server Service tools/configuration aids Backup/Restore manually Backup/Restore automatically Simulation 	Yes Yes Yes Yes; WinAC RTX Yes; without NC channel Yes Yes No No No No No No Yes No Yes No Yes No Yes No Yes No Yes
 \$7-1200 \$7-1500 \$7-200 \$7-300/400 LOGO! WinAC \$INUMERIK \$IMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) Modicon (Modbus TCP/IP) Modicon (Modbus) OPC UA Client OPC UA Server Service tools/configuration aids Backup/Restore manually Backup/Restore automatically Simulation Device switchover Peripherals/Options 	Yes Yes Yes Yes Yes; WinAC RTX Yes; without NC channel Yes Yes No No Yes No No No No Yes No Yes No Yes No Yes Yes Yes
 \$7-1200 \$7-1500 \$7-200 \$7-300/400 LOGO! WinAC \$INUMERIK \$IMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) Modicon (Modbus TCP/IP) Modicon (Modbus) OPC UA Client OPC UA Server Service tools/configuration aids Backup/Restore manually Backup/Restore automatically Simulation Device switchover Peripherals/Options Printer 	Yes Yes Yes Yes; WinAC RTX Yes; without NC channel Yes Yes No No Yes No No No No Yes No Yes No Yes No Yes Yes Yes Yes Yes
 \$7-1200 \$7-200 \$7-200 \$7-300/400 LOGO! WinAC \$INUMERIK \$IMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) Modicon (Modbus TCP/IP) Modicon (Modbus TCP/IP) Modicon (Modbus) OPC UA Client OPC UA Server Service tools/configuration aids Backup/Restore manually Backup/Restore automatically \$imulation Device switchover Peripherals/Options Printer SIMATIC HMI MM memory card: Multi Media Card 	Yes Yes Yes Yes; WinAC RTX Yes; without NC channel Yes Yes No No Yes No No No Yes No Yes No Yes No Yes Yes No Yes Yes No Yes Yes
 \$7-1200 \$7-1500 \$7-200 \$7-300/400 LOGO! WinAC \$INUMERIK \$IMOTION Allen Bradley (EtherNet/IP) Allen Bradley (DF1) Mitsubishi (MC TCP/IP) Mitsubishi (FX) OMRON (FINS TCP) OMRON (LINK/Multilink) Modicon (Modbus TCP/IP) Modicon (Modbus) OPC UA Client OPC UA Server Service tools/configuration aids Backup/Restore manually Backup/Restore automatically Simulation Device switchover Peripherals/Options Printer 	Yes Yes Yes Yes; WinAC RTX Yes; without NC channel Yes Yes No No Yes No No No No Yes No Yes No Yes No Yes Yes Yes Yes Yes

SIMATIC HMI CF memory card Compact Flash Card	No
USB memory	Yes
SIMATIC IPC USB Flashdrive (USB stick)	Yes
SIMATIC HMI USB stick	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	194 mm
Height of housing front	166 mm
Weights	
Weight (without packaging)	0.7 kg
Weight (with packaging)	0.95 kg
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