SIEMENS

Data sheet   **6AV2125-2DB23-0AX0**

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	
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	

1/12/2023

Current consumption (rated value)	210 mA
Starting current inrush I²t	0.37 A²·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 wireless interfaces	0
Number of SD card slots	0

Protocols

PROFINET	Yes
Supports protocol for PROFINET IO	Yes
PROFIsafe	Yes
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

● supported standards	
— Radio standard WLAN 802.11	No
— Bluetooth radio standard	No

Interrupts/diagnostics/status information

Diagnoses	
● 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	No; Available soon
Suitable for safety functions	Yes
Marine approval	Yes
Highest safety class achievable in safety mode	
● Performance level according to ISO 13849-1	PLe
● SIL acc. to IEC 61508	SIL 3
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
Marine approval	
● 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	
● 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
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	50
● Limit values	Yes
● Multiplexing	Yes
● Structures	Yes
● Arrays	Yes
Images	
● Number of configurable images	500
● Permanent window/default	Yes
● Global image	Yes

1/12/2023

● Pop-up images	Yes
● Slide-in images	Yes
● Image selection by PLC	Yes
● Image number in the PLC	Yes
Image objects	
● Number of objects per image	50
● 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	5
● 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
● HTML browser	No
● PDF display	No
● IP camera display	Yes
● 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	No
— 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	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	
● S7-1200	Yes
● S7-1500	Yes
● S7-200	Yes
● S7-300/400	Yes
● LOGO!	Yes
● WinAC	Yes; WinAC RTX
● SINUMERIK	Yes; without NC channel
● 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
● OPC UA Client	Yes
● OPC UA Server	Yes
Service tools/configuration aids	
● Backup/Restore manually	Yes
● Backup/Restore automatically	No
● Simulation	Yes
● Device switchover	Yes
Peripherals/Options	
Printer	Yes
SIMATIC HMI MM memory card: Multi Media Card	No
SIMATIC HMI SD memory card: Secure Digital memory card	No
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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