SIEMENS

Data sheet

6AV2125-2JB23-0AX0



SIMATIC HMI KTP900F Mobile, 9.0" TFT display, 800x 480 pixel, 16m colors, key and touch operation, 10 function keys, 1x PROFINET/Industrial Ethernet interface, 1x multimedia card, 1x USB, Key-operated switch, acknowledgement button, 1 emergency stop/stop button configurable from WinCC Comfort V13 SP1

General information		
Product type designation	KTP900F 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) 	Yes	
 Emergency stop button (illuminated and forced blocking) 	Yes	
 Acknowledgement button (3-stage) 	Yes	
 Key-operated switch 	Yes	
 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	

normiasible range lawer limit (DC)	40.01/
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 A²·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	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
Interrupts/diagnostics/status information	
Diagnoses	
Diagnostic information readable	Yes
EMC	
Emission of radio interference acc. to EN 55 011	Ver
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°0
• max.	45 °C
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	0° 00
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	Vee
• 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
	165
Help system	500
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,	Yes
• System event, more (SIMATIC 37, SINUMERIK, SIMOTION,)	
Number of characters per message	80
Number of process values per message	8
· · · -	o Yes
Acknowledgment groups	
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	
Variables	
Number of variables per screen	
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	50
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)	Al-
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
• \$7-300/400	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)	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	Yes
	Ver
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
Dimensions	
Width of the housing front	307.5 mm
Height of housing front	223.5 mm
Weights	
Weight (without packaging)	1.6 kg
Weight (with packaging)	1.7 kg
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