## 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)	
<ul> <li>Horizontal image resolution</li> </ul>	800 pixel
<ul> <li>Vertical image resolution</li> </ul>	480 pixel
Backlighting	
<ul> <li>MTBF backlighting (at 25 °C)</li> </ul>	50 000 h
Backlight dimmable	Yes; 0-100 %
Control elements	
Keyboard fonts	
Function keys	
<ul> <li>Number of function keys</li> </ul>	10
<ul> <li>Number of function keys with LEDs</li> </ul>	10
<ul> <li>Keys with LED</li> </ul>	Yes
<ul> <li>Numeric keyboard</li> </ul>	Yes; Onscreen keyboard
alphanumeric keyboard	Yes; Onscreen keyboard
Touch operation	
<ul> <li>Design as touch screen</li> </ul>	Yes
Design as multi-touch screen	No
Special operator controls	
<ul> <li>Stop button (forced blocking)</li> </ul>	Yes
<ul> <li>Emergency stop button (illuminated and forced blocking)</li> </ul>	Yes
<ul> <li>Acknowledgement button (3-stage)</li> </ul>	Yes
Key-operated switch	Yes
Illuminated pushbutton	Yes
Camera	
integrated camera	No
Expansions for operator control of the process	
<ul> <li>Direct keys (touch buttons as S7 input I/O)</li> </ul>	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) Starting current inrush I²t  Power  Active power input, typ.  Processor  Processor type  Memory	450 mA 0.135 A²-s
Power Active power input, typ. Processor Processor type	U.135 A <sup>2</sup> ·S
Active power input, typ.  Processor  Processor type	
Processor Processor type	
Processor type	11 W
Memory	ARM
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	100
HTTP	Yes
• HTTPS	Yes
• HTML	Yes
• XML • CSS	No Yea
• USS	Yes
	No Was
Active X	Yes
<ul><li>Active X</li><li>JavaScript</li></ul>	No
<ul><li>Active X</li><li>JavaScript</li><li>Java VM</li></ul>	
<ul><li>Active X</li><li>JavaScript</li><li>Java VM</li><li>Further protocols</li></ul>	V
<ul> <li>Active X</li> <li>JavaScript</li> <li>Java VM</li> <li>Further protocols</li> <li>MODBUS</li> </ul>	Yes
<ul> <li>Active X</li> <li>JavaScript</li> <li>Java VM</li> <li>Further protocols</li> <li>MODBUS</li> <li>other bus systems</li> </ul>	Yes No
Active X JavaScript Java VM  Further protocols MODBUS other bus systems  communication functions / header	
<ul> <li>Active X</li> <li>JavaScript</li> <li>Java VM</li> <li>Further protocols</li> <li>MODBUS</li> <li>other bus systems</li> <li>communication functions / header</li> <li>Wireless communication</li> </ul>	
Active X JavaScript Java VM  Further protocols  MODBUS other bus systems  communication functions / header  Wireless communication supported standards	No
<ul> <li>Active X</li> <li>JavaScript</li> <li>Java VM</li> <li>Further protocols</li> <li>MODBUS</li> <li>other bus systems</li> <li>communication functions / header</li> <li>Wireless communication</li> </ul>	

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
<ul> <li>Limit class B, for use in residential areas</li> </ul>	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	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; in preparation
<ul> <li>Det Norske Veritas (DNV)</li> </ul>	Yes
<ul> <li>Korean Register of Shipping (KRS)</li> </ul>	No
Lloyds Register of Shipping (LRS)	Yes
<ul> <li>Nippon Kaiji Kyokai (Class NK)</li> </ul>	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
<ul> <li>WinCC Comfort (TIA Portal)</li> </ul>	Yes
<ul> <li>WinCC Advanced (TIA Portal)</li> </ul>	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
<ul> <li>Pocket Word</li> </ul>	No
<ul> <li>Pocket Excel</li> </ul>	No
PDF Viewer	Yes
Media Player	No
<ul> <li>SIMATIC WinCC Sm@rtServer</li> </ul>	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	
<ul> <li>Number of projects (internal)</li> </ul>	0
<ul> <li>Number of projects (external)</li> </ul>	0
- realistic of projects (external)	
Message system	
	32
Message system	
Message system  • Number of alarm classes	
Message system  • Number of alarm classes  • Bit messages	32
Message system  • Number of alarm classes  • Bit messages  — Number of bit messages	32
Message system  • Number of alarm classes  • Bit messages  — Number of bit messages  • Analog messages	32 4 000
Message system  • Number of alarm classes  • Bit messages  — Number of bit messages  • Analog messages  — Number of analog messages	32 4 000 200
Message system  Number of alarm classes Bit messages — Number of bit messages Analog messages — Number of analog messages  S7 alarm number procedure	32 4 000 200 Yes
Message system  Number of alarm classes Bit messages — Number of bit messages Analog messages — Number of analog messages  S7 alarm number procedure System messages HMI System event, more (SIMATIC S7, SINUMERIK,	32 4 000 200 Yes Yes
Message system  Number of alarm classes Bit messages — Number of bit messages Analog messages — Number of analog messages  S7 alarm number procedure System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,)	32 4 000 200 Yes Yes Yes
Message system  Number of alarm classes  Bit messages — Number of bit messages  Analog messages — Number of analog messages  S7 alarm number procedure  System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,)  Number of characters per message	32 4 000 200 Yes Yes Yes
Message system  Number of alarm classes Bit messages — Number of bit messages  Analog messages — Number of analog messages  S7 alarm number procedure System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message	32 4 000 200 Yes Yes Yes 80 8
Message system  Number of alarm classes Bit messages — Number of bit messages  Analog messages — Number of analog messages — Number of analog messages  S7 alarm number procedure System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Acknowledgment groups	32 4 000 200 Yes Yes Yes 80 8 Yes
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Number of alarm classes     Bit messages     — Number of bit messages     — Number of analog messages     — Number of analog messages     — Number of analog messages     • S7 alarm number procedure     • System messages HMI     • System event, more (SIMATIC S7, SINUMERIK, SIMOTION,)     • Number of characters per message     • Number of process values per message     • Acknowledgment groups     • Message indicator     • Message buffer	32 4 000 200 Yes Yes Yes Yes Yes Yes 80 8 Yes Yes
Number of alarm classes     Bit messages     — Number of bit messages     — Number of analog messages     — Number of analog messages     — Number of analog messages     • S7 alarm number procedure     • System messages HMI     • System event, more (SIMATIC S7, SINUMERIK, SIMOTION,)     • Number of characters per message     • Number of process values per message     • Acknowledgment groups     • Message indicator     • Message buffer     — Number of entries	32 4 000 200 Yes Yes Yes Yes Yes 80 8 Yes Yes Yes
Message system  Number of alarm classes Bit messages — Number of bit messages  Analog messages — Number of analog messages  S7 alarm number procedure System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Acknowledgment groups Message indicator Message buffer — Number of entries — Circulating buffer	32 4 000 200 Yes Yes Yes Yes Yes 80 8 Yes Yes Yes
Message system  Number of alarm classes Bit messages — Number of bit messages  Analog messages — Number of analog messages  S7 alarm number procedure System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Acknowledgment groups Message indicator Message buffer — Number of entries — Circulating buffer — retentive	32 4 000 200 Yes Yes Yes Yes 80 8 Yes Yes Yes Yes Yes
Message system  Number of alarm classes Bit messages — Number of bit messages  Analog messages — Number of analog messages  S7 alarm number procedure System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Acknowledgment groups Message indicator Message buffer — Number of entries — Circulating buffer — retentive — maintenance-free	32 4 000 200 Yes Yes Yes Yes 1 024 Yes Yes
Message system  Number of alarm classes Bit messages — Number of bit messages  Analog messages — Number of analog messages  S7 alarm number procedure System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Acknowledgment groups  Acknowledgment groups Message indicator Message buffer — Number of entries — Circulating buffer — retentive — maintenance-free  Recipe management	32 4 000 200 Yes Yes Yes Yes  80 8 Yes Yes Yes Yes Yes Yes Yes Yes
Message system  Number of alarm classes Bit messages — Number of bit messages  Analog messages — Number of analog messages  S7 alarm number procedure System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Acknowledgment groups Message indicator Message buffer — Number of entries — Circulating buffer — retentive — maintenance-free  Recipe management Number of recipes	32 4 000 200 Yes Yes Yes Yes 1 024 Yes Yes Yes Yes Yes
Message system  Number of alarm classes Bit messages — Number of bit messages  Analog messages — Number of analog messages  S7 alarm number procedure System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Acknowledgment groups Message indicator Message buffer — Number of entries — Circulating buffer — retentive — maintenance-free  Recipe management Number of recipes Data records per recipe	32 4 000 200 Yes Yes Yes Yes 1 024 Yes Yes Yes Yes Yes Yes
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Message system  Number of alarm classes Bit messages — Number of bit messages  Analog messages — Number of analog messages  S7 alarm number procedure System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Acknowledgment groups Message indicator Message buffer — Number of entries — Circulating buffer — retentive — maintenance-free  Recipe management Number of recipes Data records per recipe Entries per data record Size of internal recipe memory Recipe memory expandable	32 4 000 200 Yes Yes Yes Yes 80 8 Yes Yes Yes Yes 1 024 Yes
Message system  Number of alarm classes Bit messages — Number of bit messages  Analog messages — Number of analog messages  S7 alarm number procedure System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Acknowledgment groups Message indicator Message buffer — Number of entries — Circulating buffer — retentive — maintenance-free  Recipe management Number of recipes Data records per recipe Entries per data record Size of internal recipe memory Recipe memory expandable  Variables	32 4 000 200 Yes Yes Yes Yes Yes 80 8 Yes Yes Yes Yes 1 024 Yes
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Number of alarm classes Bit messages — Number of bit messages — Number of analog messages  Analog messages — Number of analog messages  S7 alarm number procedure System messages HMI System event, more (SIMATIC S7, SINUMERIK, SIMOTION,) Number of characters per message Number of process values per message Number of process values per message Acknowledgment groups Message indicator Message buffer — Number of entries — Circulating buffer — retentive — maintenance-free  Recipe management Number of recipes Data records per recipe Entries per data record Size of internal recipe memory Recipe memory expandable  Variables  Number of variables per device Number of variables per screen	32 4 000 200 Yes Yes Yes Yes 80 8 Yes Yes Yes 1 024 Yes Yes Yes Yes 2 048 400

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• Structures	Yes
Arrays	Yes
Images	500
Number of configurable images	500
Permanent window/default     Clabel in a re-	Yes
Global image	Yes
Image selection by PLC	Yes
Image number in the PLC	Yes
Image objects	400
Number of objects per image  Total folds	400
• Text fields	Yes
• I/O fields	Yes
Graphic I/O fields (graphics list)  Comballs I/O fields (deathlist)	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	200
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	
<ul> <li>Number of user groups</li> </ul>	50
<ul> <li>Number of user rights</li> </ul>	32
<ul><li>Number of users</li></ul>	50
<ul> <li>Password export/import</li> </ul>	Yes
SIMATIC Logon	Yes

Logging through printer	
• Alarms	Yes
<ul><li>Report (shift log)</li></ul>	Yes
Hardcopy	No
Electronic print to file	No
Character sets	
<ul> <li>Keyboard fonts</li> </ul>	
— 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
<ul><li>Allen Bradley (EtherNet/IP)</li></ul>	Yes
● Allen Bradley (DF1)	No
Mitsubishi (MC TCP/IP)	Yes
<ul><li>Mitsubishi (FX)</li></ul>	Yes
<ul><li>OMRON (FINS TCP)</li></ul>	No
<ul> <li>OMRON (LINK/Multilink)</li> </ul>	No
<ul> <li>Modicon (Modbus TCP/IP)</li> </ul>	Yes
<ul><li>Modicon (Modbus)</li></ul>	No
OPC UA Client	Yes
OPC UA Server	Yes
Service tools/configuration aids	
<ul> <li>Backup/Restore manually</li> </ul>	Yes
<ul> <li>Backup/Restore automatically</li> </ul>	Yes
<ul> <li>Simulation</li> </ul>	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)	1.6 kg
Weight (with packaging)	1.7 kg

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