SIEMENS

Data sheet   **6AG1647-0AE11-4AX0**

spare part SIPLUS HMI KTP1000 Basic Color DP based on 6AV6647-0AE11-3AX0 with conformal coating, 0...+50 °C,
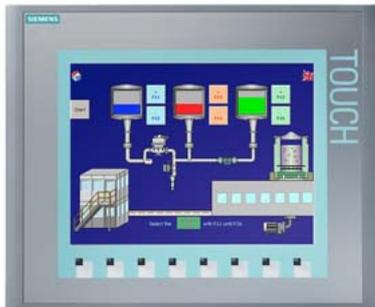
General information	
Product type designation	KTP1000 Basic color DP
Display	
Design of display	TFT
Screen diagonal	10.4 in
Display width	211.2 mm
Display height	158.4 mm
Number of colors	256
Resolution (pixels)	
● Horizontal image resolution	640 pixel
● Vertical image resolution	480 pixel
Backlighting	
● MTBF backlighting (at 25 °C)	50 000 h
Control elements	
Keyboard fonts	
● Function keys	
— Number of function keys	8
— Number of function keys with LEDs	0
● Keys with LED	No
● System keys	No
● Numeric keyboard	Yes; Onscreen keyboard
● alphanumeric keyboard	Yes; Onscreen keyboard
Touch operation	
● Design as touch screen	Yes
Installation type/mounting	
Mounting position	vertical
Rack mounting	No
Wall mounting/direct mounting	No
maximum permissible angle of inclination without external ventilation	35°
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	
Starting current inrush I²t	0.2 A²·s
Processor	
Processor type	RISC 32 bit
Memory	

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Flash	Yes
RAM	Yes
Memory available for user data	1 024 kbyte
Type of output	
Acoustics	Sound signal
Time of day	
Clock	
● Software clock	Yes
Interfaces	
Number of industrial Ethernet interfaces	0
Number of RS 485 interfaces	1
Number of RS 422 interfaces	1
Number of RS 232 interfaces	0
Number of USB interfaces	0
Number of 20 mA interfaces (TTY)	0
Number of parallel interfaces	0
Number of other interfaces	0
With software interfaces	No
Industrial Ethernet	
● Industrial Ethernet status LED	0
Protocols	
PROFINET	No
Supports protocol for PROFINET IO	No
PROFIBUS	Yes
EtherNet/IP	No
MPI	Yes
Protocols (Ethernet)	
● TCP/IP	No
● DHCP	No
● SNMP	No
● DCP	No
● LLDP	No
Further protocols	
● MODBUS	Yes
Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP20
Ambient conditions	
Suited for indoor use	Yes
Suited for outdoor use	No
Ambient temperature during operation	
Operation (vertical installation)	
— For vertical installation, min.	0 °C
— For vertical installation, max.	50 °C
Operation (max. tilt angle)	
— At maximum tilt angle, min.	0 °C
— At maximum tilt angle, max.	40 °C
Altitude during operation relating to sea level	
● Installation altitude above sea level, max.	5 000 m
● Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
Relative humidity	
● With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Coolants and lubricants	
— Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air
Use in stationary industrial systems	

— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
— to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
— to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
Remark	
— Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!
Conformal coating	
● Coatings for printed circuit board assemblies acc. to EN 61086	Yes; Class 2 for high reliability
● Protection against fouling acc. to EN 60664-3	Yes; Type 1 protection
● Military testing according to MIL-I-46058C, Amendment 7	Yes; Discoloration of coating possible during service life
● Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, Class A
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
Languages	
Online languages	
● Number of online/runtime languages	5
Project languages	
● Languages per project	32
Functionality under WinCC (TIA Portal)	
Libraries	Yes
Applications/options	none
● Web browser	No
● SIMATIC WinCC Sm@rtServer	No
Task planner	Yes
Help system	Yes
● Number of characters per info text	320
Message system	
● Number of alarm classes	32
● Bit messages	Yes
— Number of bit messages	200
● Analog messages	Yes
— Number of analog messages	15
● System messages HMI	Yes
● System event, more (SIMATIC S7, SINUMERIK, SIMOTION, ...)	No
● Number of characters per message	80
● Number of process values per message	8
● Message indicator	Yes
● Message buffer	Ring buffer (n x 256 entries), retentive, maintenance-free
— Number of entries	256
— Circulating buffer	Yes
Recipe management	
● Number of recipes	5
● Data records per recipe	20

● Entries per data record	20
● Size of internal recipe memory	40 kbyte
● Recipe memory expandable	No
Variables	
● Number of variables per device	500
● Number of variables per screen	30
● Limit values	Yes
● Multiplexing	Yes
● Structures	No
Images	
● Number of configurable images	50
● Permanent window/default	Yes; No permanent window can be configured
● Image selection by PLC	Yes
● Image number in the PLC	Yes
Complex image objects	
● Status/control	No
Lists	
● Number of text lists per project	150
● Number of graphics lists per project	100
Security	
● Number of user groups	50
● Number of user rights	32
● Password export/import	No
Character sets	
● Keyboard fonts	US American (English)
— US English	Yes
Transfer (upload/download)	
● MPI/PROFIBUS DP	Yes
● USB	No
● Ethernet	No
● using external storage medium	No
Process coupling	
● S7-200	Yes
● S7-300/400	Yes
● WinAC	No
● SINUMERIK	No
● SIMOTION	No
● Allen Bradley (DF1)	Yes
● Mitsubishi (FX)	Yes
● OMRON (LINK/Multilink)	Yes
● Modicon (Modbus)	Yes
Service tools/configuration aids	
● Backup/Restore manually	Yes
● Simulation	Yes
● Device switchover	Yes
Peripherals/Options	
Peripherals	none
Printer	No
SIMATIC HMI MM memory card: Multi Media Card	No
SIMATIC HMI SD memory card: Secure Digital memory card	No
USB memory	No
Mechanics/material	
Enclosure material (front)	
● Plastic	Yes
● Aluminum	No
Dimensions	
Width of the housing front	335 mm
Height of housing front	275 mm
Mounting cutout, width	310 mm

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Mounting cutout, height	248 mm
Overall depth	60 mm
Weights	
Weight (without packaging)	2.65 kg
Weight (with packaging)	3.52 kg

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