6AG1647-0AE11-4AX0

Data sheet

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	

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 USB interfaces	0
Number of USB interfaces (TTV)	0
Number of 20 mA interfaces (TTY) Number of parallel interfaces	0
Number of other interfaces	0
With software interfaces	No
Industrial Ethernet	110
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)	0.90
— At maximum tilt angle, min.	0 °C
— At maximum tilt angle, max.	40 °C
Altitude during operation relating to sea level	5 000 m
 Installation altitude above sea level, max. 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	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity

60721-3-3	degree 3); *
— to mechanically active substances according to EN	Yes; Class 3S4 incl. sand, dust, *
60721-3-3	
Use on ships/at sea	V 01 000 11 15 1 1 1 1 1 1 1 1 1 1 1 1 1
 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	103
	none
Peripherals Printer	none
	No.
SIMATIC HMI SD memory card: Multi Media Card	No No
SIMATIC HMI SD memory card: Secure Digital memory card	No 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
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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