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Data sheet 6AG1124-0UC02-4AX0

spare part SIPLUS HMI TP1900 Comfort based on 6AV2124-0UC02-0AX0 with conformal coating, 0…+45 °C,



Figure similar

General information	
Product type designation	TP1900 Comfort
Display	
Design of display	TFT
Screen diagonal	18.5 in
Display width	409.8 mm
Display height	230.4 mm
Number of colors	16 777 216
Resolution (pixels)	
● Horizontal image resolution	1 366 pixel
● Vertical image resolution	768 pixel
Backlighting	
● MTBF backlighting (at 25 °C)	50 000 h
● Backlight dimmable	Yes; 0-100 %
Control elements	
Keyboard	
● Function keys	
— Number of function keys	0
— Number of function keys with LEDs	0
● Keys with LED	No
● System keys	No
● Numeric keyboard	Yes
● alphanumeric keyboard	Yes
Touch operation	
● Design as touch screen	Yes
Expansions for operator control of the process	
● DP direct LEDs (LEDs as S7 output I/O)	
— F1...Fx	0
● Direct keys (keys as S7 input I/O)	
— F1...Fx	0
● Direct keys (touch buttons as S7 input I/O)	40
Installation type/mounting	
Mounting position	vertical
Wall mounting/direct mounting	No
Mounting in portrait format possible	Yes
Mounting in landscape format possible	Yes
maximum permissible angle of inclination without external ventilation	35°

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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)	1.3 A
Starting current inrush I²t	0.5 A²·s
Power	
Active power input, typ.	32 W
Processor	
Processor type	X86
Storage	
Flash	Yes
RAM	Yes
Memory available for user data	24 Mbyte
Type of output	
Info LED	No
Power LED	No
Error LED	No
Acoustics	
● Buzzer	No
● Speaker	Yes
Time of day	
Clock	
● Hardware clock (real-time)	Yes
● Software clock	No
● retentive	Yes; Back-up duration typically 6 weeks
● synchronizable	Yes
Interfaces	
Number of industrial Ethernet interfaces	3
Number of RS 485 interfaces	1; RS 422 / 485 combined
Number of RS 422 interfaces	1
Number of RS 232 interfaces	0
Number of USB interfaces	2; USB 2.0
● USB Mini B	1; 5-pole
Number of 20 mA interfaces (TTY)	0
Number of parallel interfaces	0
Number of SD card slots	2
With software interfaces	No
Industrial Ethernet	
● Industrial Ethernet status LED	3
● Number of ports of the integrated switch	2
Protocols	
PROFINET	Yes
Supports protocol for PROFINET IO	Yes
IRT	Yes; As of WinCC V12
PROFIBUS	Yes
EtherNet/IP	Yes
MPI	Yes
Protocols (Ethernet)	
● TCP/IP	Yes
● DHCP	Yes
● SNMP	Yes
● DCP	Yes
● LLDP	Yes
WEB characteristics	
● HTTP	Yes

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● HTTPS	Yes
● HTML	Yes
● XML	Yes
● CSS	Yes
● Active X	Yes
● JavaScript	Yes
● Java VM	No
Redundancy mode	
Media redundancy	
— MRP	Yes
Further protocols	
● CAN	No
● MODBUS	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	
IP (at the front)	IP65
IP (rear)	IP20
NEMA (front)	
● Enclosure Type 4 at the front	Yes
● Enclosure Type 4x at the front	Yes
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; = Tmin
— For vertical installation, max.	45 °C; = Tmax
Operation (max. tilt angle)	
— At maximum tilt angle, min.	0 °C; = Tmin
— At maximum tilt angle, max.	40 °C; = Tmax
Operation (vertical installation, portrait format)	
— For vertical installation, min.	0 °C; = Tmin
— For vertical installation, max.	40 °C; = Tmax
Operation (max. tilt angle, portrait format)	
— At maximum tilt angle, min.	0 °C; = Tmin
— At maximum tilt angle, max.	35 °C; = Tmax
Ambient temperature during storage/transportation	
● min.	-20 °C
● max.	60 °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, *

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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
Operating systems	
proprietary	No
pre-installed operating system	
● Windows CE	Yes
Configuration	
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; V11 SP2 or higher
● WinCC Advanced (TIA Portal)	Yes; V11 SP2 or higher
● WinCC Professional (TIA Portal)	Yes; V11 SP2 or higher
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	Yes
● Pocket Excel	Yes
● PDF Viewer	Yes
● Media Player	Yes
● 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	320
Message system	

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● Number of alarm classes	32
● Bit messages	
— Number of bit messages	6 000
● 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	500
● Data records per recipe	1 000
● Entries per data record	2 000
● Size of internal recipe memory	4 Mbyte
● Recipe memory expandable	Yes
Variables	
● Number of variables per device	4 096
● Number of variables per screen	400
● Limit values	Yes
● Multiplexing	Yes
● Structures	Yes
● Arrays	Yes
Images	
● Number of configurable images	750
● 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	600
● 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
● Buttons	Yes
● Graphic display	Yes
● Icons	Yes
● Geometric objects	Yes
Complex image objects	
● Number of complex objects per screen	40
● 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

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● Media Player	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	50 000
● 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	Yes
— 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	Yes; PDF, HTML
Character sets	
● Keyboard fonts	
— US English	Yes
Transfer (upload/download)	
● MPI/PROFIBUS DP	Yes
● USB	Yes
● Ethernet	Yes
● using external storage medium	No
Process coupling	
● S7-1200	Yes
● S7-1500	Yes
● S7-200	Yes
● S7-300/400	Yes
● LOGO!	Yes
● WinAC	Yes
● SINUMERIK	Yes; with SINUMERIK option package
● SIMOTION	No; With WinCC, subsequent version
● Allen Bradley (EtherNet/IP)	Yes
● Allen Bradley (DF1)	Yes
● Mitsubishi (MC TCP/IP)	Yes
● Mitsubishi (FX)	Yes
● OMRON (FINS TCP)	No

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● OMRON (Host Link)	Yes
● Modicon (Modbus TCP/IP)	Yes
● Modicon (Modbus RTU)	Yes
● 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 card	Yes
USB memory	Yes
Network camera	Yes
Mechanics/material	
Enclosure material (front)	
● Plastic	No
● Aluminum	Yes
● Stainless steel	No
Dimensions	
Width of the housing front	483 mm
Height of housing front	337 mm
Mounting cutout, width	465 mm
Mounting cutout, height	319 mm
mounting depth	75 mm
Weights	
Weight (without packaging)	6.5 kg

Classifications

	Version	Classification
eClass	16	27-33-02-01
eClass	14	27-33-02-01
eClass	12	27-33-02-01
eClass	9.1	27-33-02-01
eClass	9	27-33-02-01
eClass	8	27-24-23-02
eClass	7.1	27-24-23-02
eClass	6	27-24-23-02
ETIM	10	EC001412
ETIM	9	EC001412
ETIM	8	EC001412
ETIM	7	EC001412
IDEA	4	6607
UNSPSC	15	43-21-15-06

Approvals / Certificates

General Product Approval

EMV

Manufacturer Declaration

China RoHS

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