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Product data sheet 6AV6642-0BD01-3AX0



SIMATIC TP177B 4" COLOR PN/DP TFT 256 COLOR-16:9-DISPLAY,
MPI-/PROFIBUS-DP - PROTOCOL RS485-/RS422-/USB - INTERFACE ETHERNET10/100 INTERFACE PRINTER - INTERFACE SLOT FOR MM-CARD CONFIGURABLE WITH WINCC FLEXIBLE 2008

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General information	
Product function	
Customer-specific configuration	Yes
Display	
Design of display	TFT
Screen diagonal	4.3 in
Size	4.3" (95 mm x 53 mm)
Display type	TFT, 256 Farben
Color type	Colors
Resolution (pixels)	
Horizontal image resolution	480
Vertical image resolution	272
Resolution (WxH in pixel)	480 x 272
Backlighting	
MTBF backlighting (at 25 °C)	Approx. 30,000 hours
Control elements	
Control elements	Membrane keyboard
Operating options	Keys and Touch
Function keys, programmable	4 function keys

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Connection for mouse/keyboard/barcode reader	USB / USB / USB
Keyboard fonts	
freely inscribable membrane keys	Yes
Number of function keys with LEDs	0
Multi-key operation	Yes
System keys	No
Numeric/alphabetical input	Yes (on-screen keyboard) / Yes (on-screen keyboard)
hexadecimal keyboard	Yes ; Onscreen keyboard
Touch operation	
Touch screen	Analog, resistive
Touch screen (analog/resistive)	Yes
Supply voltage	
Supply voltage	24 V DC
Input current	
Rated current	0.2 A
Inrush current A²s	0.1 A²·s
Processor	
Processor	RISC 32-bit, 266 MHz
Processor type	RISC 32-bit
Memory	
Type	Flash / RAM
Usable memory for user data	2048 KB usable memory for user data
Main memory	
Capacity of main memory, maximum	64 Mbyte
Time of day	
Clock	
Type	Hardware clock, synchronizable, no battery backup
Interfaces	
Interfaces	RS232 optional, 1 x RS422, 1 x RS485, 1 x Ethernet (RJ45) (max. 12 Mbit/s)
Number of RS 485 interfaces	1
Transmission rate, max.	12 Mbit/s
USB port	1 x USB
PC card slot	No
CF card slot	No
Multimedia card/SD card slot	combined
Special interfaces	No
Industrial Ethernet	
Industrial Ethernet interface	1 x Ethernet (RJ45)

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Industrial Ethernet status LED	1
Protocols	
PROFIBUS	Yes
MPI	Yes
Protocols (Ethernet)	
TCP/IP	Yes
Protocols (terminal link)	
Sm@rtServer	Yes
Degree and class of protection	
Front	IP65, NEMA 4, NEMA 4x, NEMA 12 (when installed)
Type of protection	IP20
IP (at the front)	IP65
NEMA	NEMA 4, NEMA 4x, NEMA 12
Rear	IP20
Standards, approvals, certificates	
Certifications	CE, GL, FM Class I Div. 2, cULus, C-TICK, NEMA 4, NEMA 4x, NEMA 12
FM Class I Div. 2	Yes
GL	Yes
ABS	No
BV	No
DNV	No
LRS	No
Class NK	No
PRS	No
Gost-R	No
Suitable for safety functions	No
Use in hazardous areas	
EX zone 2	No
EX zone 22	No
Ambient conditions	
Mounting position	vertical
maximum permissible angle of inclination without external ventilation	+/- 35 °
Storage/transport temperature	
Transport, storage	-20 °C to +60 °C
Relative humidity	
max. relative humidity	90 %
Operating systems	

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Operating system	Windows CE (Version 5)
Configuration	
Message indicator	Yes
With alarm logging system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes
Recipe administration	Yes
Configuration software	
STEP 7 Basic (TIA Portal)	No
STEP 7 Professional (TIA Portal)	No
WinCC flexible Compact	Yes
WinCC flexible Standard	Yes
WinCC flexible Advanced	Yes
WinCC Basic (TIA Portal)	No
WinCC Comfort (TIA Portal)	Yes
WinCC Advanced (TIA Portal)	Yes
WinCC Professional (TIA Portal)	Yes
Configuration tool	WinCC flexible Compact Version 2008 or higher (to be ordered separately)
2nd configuration kit	WinCC flexible Compact
Version	Version 2008
Configuration tool	WinCC flexible
Type	Compact
Languages	
Online languages	
Number of online/runtime languages	5
Languages	
Languages per project	32
Functionality under WinCC flexible	
Libraries	Yes
Task planner	Yes
Help system	Yes
Number of characters per info text	70
With alarm logging system (incl. buffer and acknowledgment)	
Number of alarm classes	32
Number of messages	2000
Bit messages	Yes
Analog messages	Yes
Number of bit messages	2000

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Number of analog messages	2000
Telegram message procedure Alarm S	Yes
System messages HMI	Yes
System messages PLC	Yes
System messages, other (SIMATIC S7, Sinumerik, Simotion, ...)	No
Message length (in characters)	80
Lines	1
Number of process values per message	8
Acknowledgment groups	Yes
Message indicator	Yes
Acoustic feedback	No
First/last value	Yes
Recipes	
Number of recipes	100
Data records per recipe	200
Entries per data record	200
Recipe memory	32 KB integrated Flash, expandable
Variables	
Number of variables per device	1000
Number of variables per screen	50
Number of variables	1000
Initial values	1000
Limit values	Yes
Multiplexing	Yes
Structs	No
Type Date & Time	1000
Images	
Number of configurable images	500
Permanent window/default	Yes
Start screen configurable	Yes
Image selection by PLC	Yes
Image number in the PLC	Yes
Image objects	
Text objects	2,500 text elements
Fields per image	50
Date/time fields	30
Index of screen context	No
Return	Yes

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Graphics object	Bit maps, icons, icon (full-screen), vector graphics
Icons	500
Icon (full screen)	50
Complex image objects	
Status/control	With SIMATIC S7
dynamic objects	Diagrams, bar graphs, sliders, analog display, invisible buttons
Number of objects per project	500
Number per image	5
Methods	Trend
Limit value lines	Yes
Number of bars per chart	5
Limit value lines	Yes
alphanumeric fields	1000
alphanumeric fields per image	50
numerical fields	1000
numerical fields per image	50
Password errors	1000
Number of slides per image	5
Number of analog indicators per image	5
Number of visible switches per project	1000
visible switches per image	100
hidden switches per image	100
Number of status switches per project	1000
Button status switches per image	100
Number of selector switches per project	1000
Selector switches per image	100
Number of decade switches per project	0
Decade switches per image	0
Number of signal lamps per project	1000
Signal lamps per image	100
Attributes for dynamic objects	
Color change	Yes
X/Y movement	Yes
Hide	Yes
Angle of turn	No
Lists	
Number of text lists per project	300
Number of text lists per image	10
Number of entries per text list	30

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Number of graphics lists per project	100
Number of graphic lists per image	10
Number of entries per graphics list	30
Security	
Number of user groups	50
Number of user rights	32
Password export/import	Yes
Data carrier support	
PC card	No
CF card	No
Logging through printer	
Recording/Printing	Alarms, report (shift report), color print, hardcopy
Transfer (upload/download)	
Transfer of configuration	MPI/PROFIBUS DP, serial, USB, Ethernet, by means of external storage medium, automatic transfer recognition
Process coupling	
Connection to controller	S5, S7-200, S7- 300/400, TI 505, SINUMERIK, SIMOTION, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), OMRON (LINK/Multilink), Modicon (Modbus), weitere Fremdtreiber siehe Kapitel "Systemkopplungen"
S7-1200	Yes
S7-1500	No
S7-200	Yes
PPI (point-to-point)	Yes
PPI network	Yes
MPI	Yes
PROFIBUS DP	Yes
Ethernet	Yes
S7-300/400	Yes
MPI	Yes
PROFIBUS DP	Yes
PROFINET	Yes
S5	Yes ; only PROFIBUS DP
serial	No
PROFIBUS DP	Yes
TI 505	Yes
Allen Bradley (DF1)	Yes
Allen Bradley (DF485)	Yes
Mitsubishi (FX)	Yes
Mitsubishi (MP4)	No

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Telemechanique (ADJUST)	No
Telemecanique (Uni-Telway)	Yes
OMRON (LINK/Multilink)	Yes
Modicon (Modbus)	Yes
GE-Fanuc (SNP)	Yes
Functions	
Key repeat	No
TAB sequence	Yes
Calculating functions	Yes
Animate	Yes
Menu tree editor	Yes
Unit switchover	No
Service tools/configuration aids	
Clean screen	No
Touch calibration	Yes
Backup/restore	Yes
Simulation	Yes
Device switchover	Yes
Delta transfer	No
Monitoring function for battery and memory	No
Trace (operation archive)	No
Expandability/openness	
Open Platform Program	Yes
I/O / Options	
I/O devices	Printer
Multi Media Card	Yes
SD card	Yes
USB memory	Yes
Additional software components loadable	Yes
Dimensions	
Front of enclosure (W x H)	140 mm x 116 mm
Weight	
Weight	0.5 kg ; max.
Status	Mar 4, 2013

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