## **SIEMENS**

## Data sheet

6AV6545-0DA10-0AX0

\*\*\* SPARE PART\*\*\* SIMATIC MULTIPANEL MP370 12" COLOR TFT DISPLAY, TOUCH WINDOWS CE 3.0 CONFIGURABLE WITH PROTOOL FROM VERSION V5.2+SP3



General information	
Customer-specific configuration	No
Display	
Design of display	TFT, 256 colors
Screen diagonal	12.1 in
Color type	Colors
Resolution (pixels)	
● Resolution (WxH in pixel)	800 x 600
<ul> <li>Horizontal image resolution</li> </ul>	800 Pixel
<ul> <li>Vertical image resolution</li> </ul>	600 Pixel
Backlighting	
<ul> <li>MTBF backlighting (at 25 °C)</li> </ul>	50 000 h
Control elements	
Control elements	Touch screen
Keyboard fonts	
Membrane keyboard	No
<ul> <li>user-definable label membrane keys</li> </ul>	No
<ul> <li>Numeric/alphabetical input</li> </ul>	Yes / Yes

— hexadecimal keyboard	Yes
Multi-key operation	No
<ul> <li>Number of multi-key operations</li> </ul>	0
Touch operation	
Design as touch screen	Yes; analog, resistive
Connection type	
Connection for mouse/keyboard/barcode	USB / USB / USB
reader	
Special operator controls	
<ul> <li>Illuminated pushbutton</li> </ul>	Yes
Installation type/mounting	
Mounting position	vertical
maximum permissible angle of inclination without	35°
external ventilation	
Supply voltage	
Type of supply voltage	DC
UPS connectable (serial)	Yes
Input current	
Current consumption (rated value)	1.15 A
Starting current inrush I²t	0.5 A²·s
Power consumption two	28 W
Power consumption, typ.	ZO VV
Processor	
Processor type	MIPS
Drives	
Diskette drive	No
CD-ROM	No
Hard disk	No
Memory	
Memory Type of memory	Flash / RAM
Type of memory  Memory available for user data	Flash / RAM
Type of memory	Flash / RAM
Type of memory  Memory available for user data  Battery	Flash / RAM
Type of memory  Memory available for user data  Battery  Backup battery	Flash / RAM 7 168 kbyte
Type of memory  Memory available for user data  Battery  Backup battery  • Backup battery  • Backup time, min.	Flash / RAM 7 168 kbyte optional 3.6 V
Type of memory  Memory available for user data  Battery  Backup battery  Backup battery  Backup time, min.  Type of output	Flash / RAM 7 168 kbyte  optional 3.6 V 3 y
Type of memory  Memory available for user data  Battery  Backup battery  • Backup battery  • Backup time, min.	Flash / RAM 7 168 kbyte optional 3.6 V
Type of memory  Memory available for user data  Battery  Backup battery  • Backup battery  • Backup time, min.  Type of output  Info LED	Flash / RAM 7 168 kbyte  optional 3.6 V 3 y

Time of day	
Clock	
<ul> <li>Type</li> </ul>	Hardware clock, battery backup, synchronizable
• retentive	Yes; yes, via optional battery
• synchronizable	Yes
Interfaces	
Interfaces/bus type	1 x TTY, 2 x RS232, 1 x RS422, 1 x RS485, 1 x Ethernet (RJ45) (max. 12 Mbit/s)
Number of RS 485 interfaces	1
<ul> <li>Transmission rate, max.</li> </ul>	12 Mbit/s
USB port	1 x USB
PC card slot	1 x PC card slot
CF card slot	1 x CF card slot
Industrial Ethernet	
Industrial Ethernet interface	1 x Ethernet (RJ45)
Degree and class of protection	
Front	IP65
IP (at the front)	IP65
IP (rear)	IP20
Standards, approvals, certificates	
Certifications	CE, FM Class I Div. 2, cULus, EX Zone 2/22
Ambient conditions	
Ambient temperature during operation	
• min.	0 °C
• max.	50 °C
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	0° ℃
Relative humidity	
Operation, max.	85 %
Operating systems	
Operating system	Windows CE
Configuration	
Configuration software	
Configuration tool	ProTool Version 5.2 SP 3 or higher, or WinCC flexible Standard Version 2004 or higher (to be ordered separately)
• 1. Configuration kit	ProTool
— Version	Version 5.2 SP 3
<ul><li>Configuration tool</li></ul>	ProTool
• 2. Configuration kit	WinCC flexible Standard

— Version	Version 2004
— Configuration tool	WinCC flexible
— Туре	Standard

Languages Online languages	
Number of online/runtime languages	5
Project languages	
Languages per project	32

Functionality under WinCC (TIA Portal) Libraries	Yes
Number of Visual Basic Scripts	165
·	No
Debugging in the simulator  Task starses.	
Task planner	Yes
Help system	70
Number of characters per info text	
Number of tooltips	0
Message system	20
Number of alarm classes	32
Number of messages	4 000
Bit messages	Yes
<ul><li>— Number of bit messages</li></ul>	4 000
Analog messages	Yes
<ul> <li>Number of analog messages</li> </ul>	4 000
Telegram message procedure Alarm S	Yes
<ul> <li>System messages HMI</li> </ul>	Yes
<ul> <li>System messages PLC</li> </ul>	Yes
<ul> <li>System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)</li> </ul>	Yes
• Lines	1
<ul> <li>Number of characters per message</li> </ul>	80
<ul> <li>Number of process values per message</li> </ul>	8
<ul> <li>Acknowledgment groups</li> </ul>	Yes
Message indicator	Yes
acoustic feedback	No
• First/last value	Yes
Recipe management	
Number of recipes	500
Data records per recipe	1 000
Entries per data record	1 000
Recipe memory	128 KB integrated Flash, expandable
Variables	

<ul> <li>Number of variables per device</li> </ul>	2 048
<ul> <li>Number of variables per screen</li> </ul>	400
<ul><li>Number of variables</li></ul>	2 000
Initial values	2 048
Type Date & Time	2 048
Limit values	Yes
<ul><li>Multiplexing</li></ul>	Yes
Structures	Yes
Images	
Number of configurable images	500
<ul> <li>Permanent window/default</li> </ul>	Yes
Start screen configurable	Yes
<ul><li>Image selection by PLC</li></ul>	Yes
<ul> <li>Image number in the PLC</li> </ul>	Yes
Image objects	
● Text objects	30000 text elements
<ul> <li>Number of I/O fields per image</li> </ul>	400
<ul> <li>Number of date/time fields</li> </ul>	400
<ul> <li>Index of screen context</li> </ul>	No
• Return	Yes
<ul> <li>Graphics object</li> </ul>	Bit maps, icons, vector graphics
— Icons	2 000
— Icon (full screen)	0
Complex image objects	
Status/control	With SIMATIC S7
dynamic objects	Diagrams, bar graphs, sliders, analog display, invisible buttons
<ul> <li>Number of objects per project</li> </ul>	2 000
<ul> <li>Number of curve diagrams per image</li> </ul>	20
<ul><li>Methods</li></ul>	Trend / profile
Bar graphs	
<ul> <li>Number of bars per chart</li> </ul>	20
• Sliders	
<ul> <li>Number of slides per image</li> </ul>	20
Pointer instruments	
<ul> <li>Number of analog indicators per image</li> </ul>	20
Limit value lines	Yes
Number of alphanumerical fields	300
— alphanumeric fields per image	400
Number of numerical fields	2 048
— numerical fields per image	400
Number of password fields	2 048

<ul> <li>Number of visible switches per project</li> </ul>	400
<ul> <li>visible switches per image</li> </ul>	400
<ul> <li>hidden switches per image</li> </ul>	400
<ul> <li>Number of status switches per project</li> </ul>	400
<ul> <li>Number of status switches per image</li> </ul>	400
<ul> <li>Number of selector switches per project</li> </ul>	400
<ul> <li>Selector switches per image</li> </ul>	400
<ul> <li>Number of decade switches per project</li> </ul>	400
<ul> <li>Decade switches per image</li> </ul>	400
<ul> <li>Number of signal lamps per project</li> </ul>	400
— Signal lamps per image	400
Attributes for dynamic objects	
Color change	Yes
<ul> <li>X/Y movement</li> </ul>	Yes
• Hide	Yes
Angle of rotation	No
Lists	
Number of text lists per project	500
<ul> <li>Number of text lists per image</li> </ul>	400
<ul> <li>Number of entries per text list</li> </ul>	256
<ul> <li>Number of graphics lists per project</li> </ul>	500
<ul> <li>Number of graphic lists per image</li> </ul>	400
<ul> <li>Number of entries per graphics list</li> </ul>	256
Archiving	
<ul> <li>Number of archives per device</li> </ul>	50
<ul> <li>Number of measuring points per project</li> </ul>	50
<ul> <li>Number of entries per archive</li> </ul>	50 000
Message archive	Yes
<ul> <li>Process value archive</li> </ul>	Yes
<ul> <li>Archiving methods</li> </ul>	Sequence archive, circular log, alarm log, process value archive
<ul> <li>Sequential archive</li> </ul>	Yes
— Short-term archive	Yes
Memory location	PC card, CF card, Ethernet
— PC card	Yes
— CF card	Yes
— USB memory	No
— Ethernet	Yes
Data storage format	CSV file, readable, e.g. with MS Excel, MS Access
— CSV	Yes
— TXT	No
external evaluation	Readable, e.g. with MS Excel, MS Access, etc.

• Size of archive	depending on free memory on ext. card/stick or on free hard disk space via network drive
Online evaluation	via trends
— using trend curves	Yes
Filters	
• cyclic	Yes
Tolerance	Yes
Change	Yes
Security	
Number of user groups	50
<ul> <li>Number of user rights</li> </ul>	32
<ul> <li>Password export/import</li> </ul>	Yes
Data carrier support	
• PC card	Yes
• CF card	Yes
Diskette drive	No
Hard disk	No
• CD-ROM	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, Win AC, PC (TCP/IP), SINUMERIK, SIMOTION, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), Telemecanique (ADJUST), OMRON (LINK/Multilink), Modicon (Modbus), for further non-Siemens drivers, see section on "System interfaces"
• S7-200	Yes
— PPI (point-to-point)	Yes
— PPI network	Yes
— MPI	Yes
— PROFIBUS DP	Yes
• S7-300/400	Yes
— MPI	Yes
— PROFIBUS DP	Yes
— PROFINET	Yes
• S5	Yes
— serial	Yes
— PROFIBUS DP	Yes
● TI 505	Yes
Allen Bradley (DF1)	Yes

<ul> <li>Allen Bradley (DF485)</li> </ul>	Yes
Mitsubishi (FX)	Yes
Mitsubishi (MP4)	Yes
Telemecanique (ADJUST)	Yes
Telemecanique (Uni-Telway)	Yes
<ul> <li>OMRON (LINK/Multilink)</li> </ul>	Yes
<ul><li>Modicon (Modbus)</li></ul>	Yes
• GE-Fanuc (SNP)	Yes
Functions	
Key repeat	No
• TAB sequence	Yes
Calculating functions	Yes
Animate	Yes
Menu tree editor	No
Unit switchover	No
Service tools/configuration aids	
Clean screen	Yes
<ul> <li>Touch calibration</li> </ul>	Yes
<ul> <li>Backup/Restore manually</li> </ul>	Yes
<ul> <li>Simulation</li> </ul>	Yes
Device switchover	Yes
Delta transfer	Yes
<ul> <li>Monitoring function for battery and memory</li> </ul>	Yes
<ul> <li>Trace (operation archive)</li> </ul>	No
Expandability/openness	
Open Platform Program	Yes
Peripherals/Options	
Peripherals	Printer, barcode reader
SIMATIC HMI MM memory card: Multi Media	No
Card	
SIMATIC HMI SD memory card: Secure Digital     memory card	No
memory card  • USB memory	No
• OSB memory	140
Dimensions	
Width of the housing front	335 mm
Height of housing front	275 mm
Weights	
Weight (without packaging)	4.5 kg
Other	
free hotline	Yes

Warranty period 1 y

**last modified:** 09/17/2016