

SIEMENS

Product data sheet

6AV6643-0BA01-1AX0

SIMATIC OP 277 6" OPERATOR PANEL 5.7" TFT
DISPLAY 4 MB CONFIGURING MEMORY,
CONFIGURABLE WITH WINCC FLEXIBLE 2005
STANDARD SP1 OR HIGHER



General information	
Customer-specific configuration	Yes
Display	
Design of display	TFT
Screen diagonal	5.7 in
Size	5.7"
Display type	TFT, 256 Farben
Color type	Colors
Resolution (pixels)	
Horizontal image resolution	320
Vertical image resolution	240
Resolution (WxH in pixel)	320 x 240
Backlighting	
MTBF backlighting (at 25 °C)	about 60,000 hours
Control elements	

Control elements	Membrane keyboard
Operating mode	
Operating options	Keys
Function keys, programmable	24 function keys, 18 with LEDs
Connection for mouse/keyboard/barcode reader	USB / USB / USB
Keyboard fonts	
Keys with LED	Yes
freely inscribable membrane keys	Yes
Number of function keys with LEDs	18
Multi-key operation	Yes
Number of multi-key operations	2
Numeric/alphabetical input	Yes / Yes (only English font can be displayed, only onscreen)
Supply voltage	
Supply voltage	24 V DC
Processor	
Processor	RISC 32-bit
Processor type	RISC 32-bit
Memory	
Type	Flash / RAM
Usable memory for user data	4 MB usable memory for user data
Main memory	
Capacity of main memory, maximum	64 Mbyte
Time of day	
Clock	
Type	Software clock, synchronizable, no battery backup
Interfaces	
Interfaces	1 x RS422, 1 x RS485, 1 x Ethernet (RJ45)
Number of RS 485 interfaces	1
USB port	1 x USB
Multi Media Card slot	1 x Multi Media Card slot
Industrial Ethernet	
Industrial Ethernet interface	1 x Ethernet (RJ45)
Degree and class of protection	

Front	IP65
Type of protection	IP20
IP (at the front)	IP65
Rear	IP20
Standards, approvals, certificates	
Certifications	CE, UL
Suitable for safety functions	No
Ambient conditions	
Mounting position	vertical
Operating temperature	
Operation	0 °C to +50 °C
Storage/transport temperature	
Transport, storage	-20 °C to +60 °C
Relative humidity	
max. relative humidity	80 %
Operating systems	
Operating system	Windows CE
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	No
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 Standard Version 2005 SP1 or higher (to be ordered separately)
2nd configuration kit	WinCC flexible Standard
Version	Version 2005 SP 1
Configuration tool	WinCC flexible
Type	Standard
Languages	
Online languages	
Number of online/runtime languages	16
Languages	
Languages per project	32
Functionality under WinCC flexible	
Libraries	Yes
Number of Visual Basic Scripts	50
Task planner	Yes
Help system	Yes
Number of characters per info text	80
With alarm logging system (incl. buffer and acknowledgment)	
Number of alarm classes	32
Number of messages	4000
Bit messages	Yes
Analog messages	Yes
Number of bit messages	4000
Number of analog messages	4000
System messages HMI	Yes
System messages PLC	Yes
System messages, other (SIMATIC S7, Sinumerik, Simotion,..)	Yes
Message length (in characters)	80
Lines	1
Number of process values per message	8
Acknowledgment groups	Yes
Message indicator	Yes
First/last value	Yes

Recipes	
Number of recipes	300
Data records per recipe	500
Entries per data record	1000
Recipe memory	64 KB integrated Flash, expandable
Variables	
Number of variables per device	2048
Number of variables per screen	200
Number of variables	1000
Initial values	2048
Limit values	Yes
Multiplexing	Yes
Structs	Yes
Type Date & Time	2048
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	10,000 text elements
Fields per image	200
Date/time fields	200
Return	Yes
Graphics object	Bit maps, icons, vector graphics
Icons	1000
Complex image objects	
Status/control	With SIMATIC S7
dynamic objects	Diagrams, bar graphs, sliders, analog display, invisible buttons
Number of objects per project	1000
Number per image	10
Methods	Trend / profile

Limit value lines	Yes
Number of bars per chart	10
Limit value lines	Yes
alphanumeric fields	300
alphanumeric fields per image	200
numerical fields	2048
numerical fields per image	200
Password errors	2048
Number of slides per image	10
Number of analog indicators per image	10
Number of visible switches per project	200
visible switches per image	200
hidden switches per image	200
Number of status switches per project	200
Button status switches per image	200
Number of selector switches per project	200
Selector switches per image	200
Number of decade switches per project	200
Decade switches per image	200
Number of signal lamps per project	200
Signal lamps per image	200
Attributes for dynamic objects	
Color change	Yes
X/Y movement	Yes
Hide	Yes
Lists	
Number of text lists per project	500
Number of text lists per image	200
Number of entries per text list	256
Number of graphics lists per project	400
Number of graphic lists per image	200
Number of entries per graphics list	256
Archiving	

Number of archives per device	20
Number of measuring points per project	20
Number of entries per archive	10000
Message archive	Yes
Process value archive	Yes
Archiving methods	
Sequential archive	Yes
Short-term archive	Yes
Memory location	Multi Media Card
Ethernet	Yes
Data storage format	
CSV	Yes
Online evaluation	
Using trend curves	Yes
Filters	
cyclic	Yes
Tolerance	Yes
Change	Yes
Security	
Number of user groups	50
Number of user rights	32
Password export/import	Yes
Logging through printer	
Recording/Printing	Alarms, report (shift report), color print, hardcopy
Transfer (upload/download)	
Transfer of configuration	MPI/PROFIBUS DP, USB, Ethernet, 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) see chapter "System interfaces"
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
serial	Yes
PROFIBUS DP	Yes
TI 505	Yes
Allen Bradley (DF1)	Yes
Allen Bradley (DF485)	Yes
Mitsubishi (FX)	Yes
Mitsubishi (MP4)	Yes
OMRON (LINK/Multilink)	Yes
Modicon (Modbus)	Yes
GE-Fanuc (SNP)	Yes
Functions	
TAB sequence	Yes
Calculating functions	Yes
Animate	Yes
Service tools/configuration aids	
Backup/restore	Yes
Simulation	Yes
Device switchover	Yes
Delta transfer	Yes
Expandability/openness	
Open Platform Program	Yes
I/O / Options	
I/O devices	Printer, barcode reader
Multi Media Card	Yes

Additional software components loadable	Yes
Dimensions	
Front of enclosure (W x H)	308 mm x 204 mm
Weight	
Weight	1.19 kg
other	
free hotline	Yes
Warranty period	1 a
Status	Jul 17, 2012