

OFFICIAL MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

6AV6641-0BA11-0AX1

Siemens official documentation for the exact article number.

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Selected official Siemens pages follow this cover.

SIMATIC Operator Panel OP 77A LC display backlit, 4.5" display graphics-capable, MPI-/PROFIBUS-DP interface to 1.5 MB, configurable from WinCC flexible 2004 Compact HSP contains open source software, which is provided free of charge. see enclosed CD



General information	
Product type designation	OP 77A
Customer-specific configuration	No
Display	
Design of display	STN
Screen diagonal	4.5 in
Color display	No
Number of colors	2; Black/white
Resolution (pixels)	
• Horizontal image resolution	160 Pixel
• Vertical image resolution	64 Pixel
Backlighting	
• MTBF backlighting (at 25 °C)	100 000 h
Control elements	
Control elements	Membrane keyboard
Keyboard fonts	
• Membrane keyboard	
— user-definable label membrane keys	Yes

• Function keys	Yes
— Number of function keys	8
— Number of function keys with LEDs	4
• System keys	Yes
— Number of system keys	23
• Numeric keyboard	Yes
• alphanumeric keyboard	Yes
• hexadecimal keyboard	Yes
• Multi-key operation	Yes
Touch operation	
• Design as touch screen	No
Connection type	
• Type of connection for mouse/keyboard/barcode reader	- / - / -
Installation type/mounting	
Mounting position	vertical
maximum permissible angle of inclination without external ventilation	80°
Supply voltage	
Type of supply voltage	DC
Input current	
Current consumption (rated value)	0.2 A
Starting current inrush I ² t	0.5 A ² ·s
Processor	
Processor type	ARM
Memory	
Type of memory	Flash / RAM
Memory available for user data	256 kbyte
Type of output	
Info LED	Yes
Power LED	No
Error LED	No
Time of day	
Clock	
• Type	Software clock, no battery backup
• retentive	No
• synchronizable	No
Interfaces	
Interfaces/bus type	1x RS 422, 1x RS 485 (max. 1.5 Mbit/s)

Number of industrial Ethernet interfaces	0
Number of RS 485 interfaces	1
Number of RS 422 interfaces	1
Number of USB interfaces	0
PC card slot	No
CF card slot	No
Multimedia card/SD card slot	No
Protocols	
Supports protocol for PROFINET IO	No
PROFIsafe	No
PROFIBUS	Yes
Protocols (Ethernet)	
• TCP/IP	No
Further protocols	
• EtherNet/IP	No
• MODBUS	No
• other bus systems	Yes
Degree and class of protection	
IP (at the front)	IP65
NEMA (front)	NEMA 4x, NEMA 12 (when installed)
IP (rear)	IP20
Standards, approvals, certificates	
Certifications	CE, GL, ABS, BV, DNV, LRS, FM Class I Div. 2, UL, CSA, cULus, EX-Zone 2 (in Vorbereitung), EX-Zone 22 (in Vorbereitung), C-TICK, NEMA 4x, NEMA 12
cULus	Yes
EAC (formerly Gost-R)	No
Suitable for safety functions	No
Use in hazardous areas	
• ATEX Zone 2	Yes
• ATEX Zone 22	Yes
• FM Class I Division 2	Yes
Marine approval	
• Germanischer Lloyd (GL)	Yes
• American Bureau of Shipping (ABS)	Yes
• Bureau Veritas (BV)	Yes
• Det Norske Veritas (DNV)	Yes
• Lloyds Register of Shipping (LRS)	Yes
• Nippon Kaiji Kyokai (Class NK)	Yes
• Polski Rejestr Statkow (PRS)	No
Ambient conditions	

Ambient temperature during operation	
• min.	0 °C
• max.	50 °C
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C
Relative humidity	
• Operation, max.	90 %
Operating systems	
pre-installed operating system	LINUX
Configuration	
Message indicator	Yes
Alarm system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes
Recipe management	No
Configuration software	
• Configuration tool	WinCC flexible Compact Version 2004 SP 1 and higher; HSP OP 77 (to be ordered separately)
• 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
Languages	
Online languages	
• Number of online/runtime languages	5
Project languages	
• Languages per project	32
Functionality under WinCC (TIA Portal)	
Libraries	Yes
Task planner	Yes
Help system	Yes
• Number of characters per info text	320
Message system	
• Number of alarm classes	32
• Number of messages	1 000