



SIMATIC OPERATOR PANEL OP77B BACKLIT LC DISPLAY,  
 4.5" DISPL. W. GRAPHICS CAPABIL MPI-/PROFIBUS-DP INTERFACE UPTO 12 MB,  
 PRINTER/USB INTERFACE,  
 SLOT FOR MMC CARD,  
 FOR CONFIGURATION OF WINCC FLEXIBLE 2004 COMPACT \*\*\*\*\* FOR THIS PRODUCT A DELIVERY STOP WILL BE DECLARED FROM OCTOBER 1ST, 2014. INFORMATION ABOUT SUCCESSOR SEE SIMATIC UPDATE ID: 62977695 FOR FURTHER QUESTIONS PLEASE APPROACH YOUR SIEMENS CONTACT PERSON.

General information	
customer-specific configuration	No
Display	
Design of display	STN
Screen diagonal	4.5 in
Size	4.5"
Display type	STN, black/white
Color type	Black/white
Resolution (pixels)	
horizontal image resolution	160
vertical image resolution	64
Resolution (WxH in pixel)	160 x 64
Backlighting	
MTBF backlighting (at 25 °C)	about 100,000 hours
Control elements	
Control elements	Membrane keyboard
Operating options	Keys
Function keys, programmable	8 function keys, 4 with LEDs
Connection for mouse/keyboard/barcode reader	- / - / -

Keyboard fonts	
Keys with LED	Yes
user-definable label membrane keys	Yes
Number of function keys with LEDs	4
Numeric/alphabetical input	Yes / Yes
hexadecimal keyboard	Yes
Multi-key operation	Yes
Touch operation	
Design as touch screen	No
Supply voltage	
Type of supply voltage	DC
Input current	
Rated current	0.2 A
Inrush current A <sup>2</sup> s	0.5 A <sup>2</sup> s
Processor	
Processor	ARM
Processor type	ARM
Memory	
Type	Flash / RAM
usable memory for user data	1000 KB usable memory for user data
Type of output	
Info LED	Yes
Power LED	No
Error LED	No
Time of day	
Clock	
Type	Software clock, no battery backup
Hardware clock (real-time clock)	No
Software clock	Yes
battery-backed	No
synchronizable	No
Interfaces	
Interfaces	1 x RS232, 1 x RS422, 1 x RS485 (max. 12 Mbit/s)
Number of RS 485 interfaces	1
Transmission rate, max.	12 Mbit/s
USB port	1 x USB
Multimedia card/SD card slot	combined
Special interfaces	No

<b>Industrial Ethernet</b>	
<b>Industrial Ethernet interface</b>	No
<b>Degree and class of protection</b>	
<b>Front</b>	IP65, NEMA 4x, NEMA 12 (when installed)
<b>IP (at the front)</b>	IP65
<b>NEMA</b>	NEMA 4x, NEMA 12
<b>Rear</b>	IP20
<b>IP (rear)</b>	IP20
<b>Standards, approvals, certificates</b>	
<b>Certifications</b>	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
<b>cULus</b>	Yes
<b>EAC (former Gost-R)</b>	No
<b>Suitable for safety functions</b>	No
<b>Marine approval</b>	
<b>Germanischer Lloyd (GL)</b>	Yes
<b>American Bureau of Shipping (ABS)</b>	Yes
<b>Bureau Veritas (BV)</b>	Yes
<b>Det Norske Veritas (DNV)</b>	Yes
<b>Lloyds Register of Shipping (LRS)</b>	Yes
<b>Nippon Kaiji Kyokai (Class NK)</b>	Yes
<b>Polski Rejestr Statkow (PRS)</b>	No
<b>Use in hazardous areas</b>	
<b>EX zone 2</b>	Yes
<b>EX zone 22</b>	Yes
<b>FM Class I Division 2</b>	Yes
<b>Ambient conditions</b>	
<b>Mounting position</b>	vertical
<b>maximum permissible angle of inclination without external ventilation</b>	+/- 80 °
<b>Storage/transport temperature</b>	
<b>Transport, storage</b>	-20 °C to +60 °C
<b>Relative humidity</b>	
<b>Operation, max.</b>	90 %
<b>Operating systems</b>	
<b>Operating system</b>	Windows CE
<b>Configuration</b>	
<b>Configuration software</b>	

<b>STEP 7 Basic (TIA Portal)</b>	No
<b>STEP 7 Professional (TIA Portal)</b>	No
<b>WinCC flexible Compact</b>	Yes
<b>WinCC flexible Standard</b>	Yes
<b>WinCC flexible Advanced</b>	Yes
<b>WinCC Basic (TIA Portal)</b>	No
<b>WinCC Comfort (TIA Portal)</b>	Yes
<b>WinCC Advanced (TIA Portal)</b>	Yes
<b>WinCC Professional (TIA Portal)</b>	Yes
<b>Configuration tool</b>	WinCC flexible Compact Version 2004 or higher (to be ordered separately)
<b>2. Configuration kit</b>	WinCC flexible Compact
<b>Version</b>	Version 2004
<b>Configuration tool</b>	WinCC flexible
<b>Type</b>	Compact
<b>Languages</b>	
<b>Online languages</b>	
<b>Number of online/runtime languages</b>	5
<b>Project languages</b>	
<b>Languages per project</b>	32
<b>Functionality under WinCC (TIA Portal)</b>	
<b>Libraries</b>	Yes
<b>Task planner</b>	Yes
<b>Help system</b>	Yes
<b>Number of characters per info text</b>	320
<b>Message system</b>	
<b>Number of alarm classes</b>	32
<b>Number of messages</b>	1000
<b>Bit messages</b>	Yes
<b>Analog messages</b>	Yes
<b>Number of bit messages</b>	1000
<b>Number of analog messages</b>	1000
<b>Telegram message procedure Alarm S</b>	Yes
<b>System messages HMI</b>	Yes
<b>System messages PLC</b>	Yes
<b>System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)</b>	No
<b>Message length (in characters)</b>	80
<b>Number of process values per message</b>	8

<b>Acknowledgment groups</b>	Yes
<b>Message indicator</b>	No
<b>acoustic feedback</b>	No
<b>First/last value</b>	Yes
<b>Recipe administration</b>	
<b>Number of recipes</b>	100
<b>Data records per recipe</b>	200
<b>Entries per data record</b>	200
<b>Recipe memory</b>	32 KB integrated Flash, expandable
<b>Variables</b>	
<b>Number of variables per device</b>	1000
<b>Number of variables per screen</b>	30
<b>Limit values</b>	Yes
<b>Multiplexing</b>	Yes
<b>Images</b>	
<b>Number of configurable images</b>	500
<b>Permanent window/default</b>	Yes
<b>Start screen configurable</b>	Yes
<b>Image selection by PLC</b>	Yes
<b>Image number in the PLC</b>	Yes
<b>Image objects</b>	
<b>Text objects</b>	2,500 text elements
<b>I/O fields per image</b>	30
<b>Date/time fields</b>	0
<b>Index of screen context</b>	No
<b>Return</b>	Yes
<b>Graphics object</b>	Bit maps, icons, icon (full-screen)
<b>Icons</b>	1000
<b>Icon (full screen)</b>	100
<b>Complex image objects</b>	
<b>dynamic objects</b>	Bar graphs
<b>Number of bars per chart</b>	5
<b>Limit value lines</b>	Yes
<b>alphanumeric fields</b>	1000
<b>alphanumeric fields per image</b>	30
<b>numerical fields</b>	1000
<b>numerical fields per image</b>	30
<b>Password fields</b>	0
<b>Number of analog indicators per image</b>	0

visible switches per image	0
hidden switches per image	0
Button status switches per image	0
Selector switches per image	0
Decade switches per image	0
Signal lamps per image	0
<b>Attributes for dynamic objects</b>	
Color change	Yes
X/Y movement	No
Hide	Yes
Angle of rotation	No
<b>Lists</b>	
Number of text lists per project	300
Number of graphics lists per project	0
Number of graphic lists per image	0
Number of entries per graphics list	0
<b>Security</b>	
Number of user groups	50
Number of user rights	32
Password export/import	Yes
<b>Logging through printer</b>	
Recording/Printing	Alarms, report (shift report), hardcopy
<b>Transfer (upload/download)</b>	
Transfer of configuration	MPI/PROFIBUS DP, serial, USB, by means of external storage medium, automatic transfer recognition
<b>Process coupling</b>	
Connection to controller	S5, S7-200, S7-300/400, TI 505, Win AC, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), OMRON (LINK/Multilink), Modicon (Modbus), further non-Siemens drivers, see chapter "System interfaces"
<b>S7-200</b>	Yes
PPI (point-to-point)	Yes
PPI network	Yes
MPI	Yes
PROFIBUS DP	Yes
Ethernet	No
<b>S7-300/400</b>	Yes
MPI	Yes
PROFIBUS DP	Yes
PROFINET	No

<b>S5</b>	Yes
<b>serial</b>	Yes
<b>PROFIBUS DP</b>	Yes
<b>TI 505</b>	Yes
<b>Allen Bradley (DF1)</b>	Yes
<b>Allen Bradley (DF485)</b>	Yes
<b>Mitsubishi (FX)</b>	Yes
<b>Mitsubishi (MP4)</b>	Yes
<b>Telemecanique (ADJUST)</b>	No
<b>Telemecanique (Uni-Telway)</b>	Yes ; Only in combination with WinCC flexible
<b>OMRON (LINK/Multilink)</b>	Yes
<b>Modicon (Modbus)</b>	Yes
<b>GE-Fanuc (SNP)</b>	Yes
<b>Functions</b>	
<b>Key repeat</b>	Yes
<b>TAB sequence</b>	Yes
<b>Calculating functions</b>	Yes
<b>Animate</b>	Yes
<b>Menu tree editor</b>	Yes
<b>Unit switchover</b>	No
<b>Service tools/configuration aids</b>	
<b>Clean screen</b>	No
<b>Touch calibration</b>	No
<b>Backup/Restore manually</b>	Yes
<b>Simulation</b>	Yes
<b>Device switchover</b>	Yes
<b>Delta transfer</b>	Yes
<b>Monitoring function for battery and memory</b>	No
<b>Trace (operation archive)</b>	No
<b>Expandability/openness</b>	
<b>Open Platform Program</b>	No
<b>Peripherals/Options</b>	
<b>Peripherals</b>	Printer
<b>Multimedia Card</b>	Yes
<b>Dimensions</b>	
<b>Front of enclosure (W x H)</b>	150 mm x 186 mm
<b>Mounting cutout/device depth (W x H / D)</b>	135 mm x 171 mm / 38,5 mm device depth
<b>Weights</b>	
<b>Weight (without packaging)</b>	0.5 kg

**Other**

**free hotline**

Yes

**Warranty period**

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Status

Jul 30, 2014