

AS OF 2015-01-01 THE PRODUCT IS BLOCKED FOR DELIVERY AND IS NO LONGER AVAILABLE AS A NEW PART. INFORMATION ABOUT SUCCESSOR SEE SIMATIC UPDATE ID: 62977695 FOR FURTHER QUESTIONS PLEASE APPROACH YOUR SIEMENS CONTACT PERSON. 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



Figure similar

General information	
Customer-specific configuration	No
Display	
Design of display	STN
Screen diagonal	4.5 in
Number of grayscales	0
Number of colors	2
Color type	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	

<ul style="list-style-type: none"> <li>• Membrane keyboard <ul style="list-style-type: none"> <li>— user-definable label membrane keys</li> </ul> </li> <li>• Function keys <ul style="list-style-type: none"> <li>— Number of function keys</li> <li>— Number of function keys with LEDs</li> </ul> </li> <li>• System keys</li> <li>• Numeric/alphabetical input <ul style="list-style-type: none"> <li>— hexadecimal keyboard</li> </ul> </li> <li>• Multi-key operation</li> </ul>	<p>Yes</p> <p>Yes</p> <p>8</p> <p>4</p> <p>Yes</p> <p>Yes / Yes</p> <p>Yes</p> <p>Yes</p>
<b>Touch operation</b>	
<ul style="list-style-type: none"> <li>• Design as touch screen</li> </ul>	No
<b>Connection type</b>	
<ul style="list-style-type: none"> <li>• Connection for mouse/keyboard/barcode reader</li> </ul>	- / - / -
<b>Installation type/mounting</b>	
Mounting position	vertical
maximum permissible angle of inclination without external ventilation	80°
<b>Supply voltage</b>	
Type of supply voltage	DC
<b>Input current</b>	
Current consumption (rated value)	0.2 A
Starting current inrush I <sup>2</sup> t	0.5 A <sup>2</sup> ·s
<b>Processor</b>	
Processor type	ARM
<b>Memory</b>	
Type of memory	Flash / RAM
Memory available for user data	1 000 kbyte
<b>Type of output</b>	
Info LED	Yes
Power LED	No
Error LED	No
<b>Time of day</b>	
<b>Clock</b>	
<ul style="list-style-type: none"> <li>• Type</li> <li>• retentive</li> <li>• synchronizable</li> </ul>	<p>Software clock, no battery backup</p> <p>No</p> <p>No</p>
<b>Interfaces</b>	
Interfaces/bus type	1 x RS232, 1 x RS422, 1 x RS485 (max. 12 Mbit/s)

Number of RS 485 interfaces	1
<ul style="list-style-type: none"> <li>• Transmission rate, max.</li> </ul>	12 Mbit/s
USB port	1 x USB
Multimedia card/SD card slot	combined
<b>Industrial Ethernet</b>	
<ul style="list-style-type: none"> <li>• Industrial Ethernet interface</li> </ul>	No
<b>Protocols</b>	
Supports protocol for PROFINET IO	No
PROFIsafe	No
PROFIBUS	Yes
<b>Protocols (Ethernet)</b>	
<ul style="list-style-type: none"> <li>• TCP/IP</li> </ul>	No
<b>Further protocols</b>	
<ul style="list-style-type: none"> <li>• EtherNet/IP</li> </ul>	No
<ul style="list-style-type: none"> <li>• MODBUS</li> </ul>	No
<ul style="list-style-type: none"> <li>• other bus systems</li> </ul>	Yes
<b>Degree and class of protection</b>	
Front	IP65, NEMA 4x, NEMA 12 (when installed)
IP (at the front)	IP65
IP (rear)	IP20
<b>Standards, approvals, certificates</b>	
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
<b>Marine approval</b>	
<ul style="list-style-type: none"> <li>• Germanischer Lloyd (GL)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• American Bureau of Shipping (ABS)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Bureau Veritas (BV)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Det Norske Veritas (DNV)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Lloyds Register of Shipping (LRS)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Nippon Kaiji Kyokai (Class NK)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Polski Rejestr Statkow (PRS)</li> </ul>	No
<b>Use in hazardous areas</b>	
<ul style="list-style-type: none"> <li>• FM Class I Division 2</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• EX zone 2</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• EX zone 22</li> </ul>	Yes
<b>Ambient conditions</b>	
Ambient temperature during operation	

• min.	0 °C
• max.	50 °C
<b>Ambient temperature during storage/transportation</b>	
• min.	-20 °C
• max.	60 °C
<b>Relative humidity</b>	
• Operation, max.	90 %

<b>Operating systems</b>	
pre-installed operating system	Windows CE

<b>Configuration</b>	
Message indicator	Yes
Alarm system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes
Recipe management	Yes
<b>Configuration software</b>	
• 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 2004 or higher (to be ordered separately)

<b>Languages</b>	
<b>Online languages</b>	
• Number of online/runtime languages	5
<b>Project languages</b>	
• Languages per project	32

<b>Functionality under WinCC (TIA Portal)</b>	
Libraries	Yes
Task planner	Yes
Help system	Yes
• Number of characters per info text	320
<b>Message system</b>	
• Number of alarm classes	32
• Number of messages	1 000
• Bit messages	Yes

— Number of bit messages	1 000
• Analog messages	Yes
— Number of analog messages	1 000
• Telegram message procedure Alarm S	Yes
• System messages HMI	Yes
• System messages PLC	Yes
• System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)	No
• Number of characters per message	80
• Number of process values per message	8
• Acknowledgment groups	Yes
• Message indicator	No
• acoustic feedback	No
• First/last value	Yes
<b>Recipe management</b>	
• Number of recipes	100
• Data records per recipe	200
• Entries per data record	200
• Recipe memory	32 KB integrated Flash, expandable
<b>Variables</b>	
• Number of variables per device	1 000
• Number of variables per screen	30
• Limit values	Yes
• Multiplexing	Yes
<b>Images</b>	
• Number of configurable images	500
• Permanent window/default	Yes
• Start screen configurable	Yes
• Image selection by PLC	Yes
• Image number in the PLC	Yes
<b>Image objects</b>	
• Text objects	2,500 text elements
• Number of I/O fields per image	30
• Number of date/time fields	0
• Index of screen context	No
• Return	Yes
• Graphics object	Bit maps, icons, icon (full-screen)
— Icons	1 000
— Icon (full screen)	100
<b>Complex image objects</b>	
• dynamic objects	Bar graphs

• Bar graphs	
— Number of bars per chart	5
• Pointer instruments	
— Number of analog indicators per image	0
• Limit value lines	Yes
• Number of alphanumerical fields	1 000
— alphanumeric fields per image	30
• Number of numerical fields	1 000
— numerical fields per image	30
• Number of password fields	0
• Number of visible switches per project	
— visible switches per image	0
— hidden switches per image	0
• Number of status switches per project	
— Number of status switches per image	0
• Number of selector switches per project	
— Selector switches per image	0
• Number of decade switches per project	
— Decade switches per image	0
• Number of signal lamps per project	
— 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"
• S7-200	Yes
— PPI (point-to-point)	Yes
— PPI network	Yes
— MPI	Yes
— PROFIBUS DP	Yes
— Ethernet	No
• S7-300/400	Yes
— MPI	Yes
— PROFIBUS DP	Yes
— PROFINET	No
• S5	Yes
— serial	Yes
— PROFIBUS DP	Yes
• TI 505	Yes
• Allen Bradley (DF1)	Yes
• Allen Bradley (DF485)	Yes
• Mitsubishi (FX)	Yes
• Mitsubishi (MP4)	Yes
• Telemecanique (ADJUST)	No
• Telemecanique (Uni-Telway)	Yes; Only in combination with WinCC flexible
• OMRON (LINK/Multilink)	Yes
• Modicon (Modbus)	Yes
• GE-Fanuc (SNP)	Yes

#### Functions

• Key repeat	Yes
• TAB sequence	Yes
• Calculating functions	Yes
• Animate	Yes
• Menu tree editor	Yes
• Unit switchover	No

#### Service tools/configuration aids

• Clean screen	No
• Touch calibration	No
• Backup/Restore manually	Yes
• Simulation	Yes
• Device switchover	Yes
• Delta transfer	Yes
• Monitoring function for battery and memory	No

• Trace (operation archive)	No
<b>Expandability/openness</b>	
• Open Platform Program	No
<b>Peripherals/Options</b>	
Peripherals	Printer
• SIMATIC HMI MM memory card: Multi Media Card	Yes
Additional software components loadable	Yes
<b>Dimensions</b>	
Width of the housing front	150 mm
Height of housing front	186 mm
Mounting cutout, width	135 mm
Mounting cutout, height	171 mm
Overall depth	38.5 mm
<b>Weights</b>	
Weight (without packaging)	0.5 kg
<b>Other</b>	
free hotline	Yes
Warranty period	1 y
<b>last modified:</b>	04/28/2017