



Figure similar

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 ***** 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.

General information

Customer-specific configuration No

Display

Design of display STN
 Screen diagonal 4.5 in
 Number of colors 2
 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) 100 000 h

Control elements

Control elements Membrane keyboard
 Operating options Keys

Keyboard

- Membrane keyboard Yes
 - freely inscribable membrane keys Yes
- Function keys
 - Number of function keys with LEDs 4
- Keys with LED Yes
- Numeric/alphabetical input Yes / Yes
 - hexadecimal keyboard Yes

• Multi-key operation	Yes
Touch operation	
• Design as touch screen	No
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
Inrush current A ² s	0.5 A ² s
Processor	
Processor type	ARM
Memory	
Usable memory for user data	1 000 kbyte
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	
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
Industrial Ethernet	
• Industrial Ethernet interface	No
Degree and class of protection	
Front	IP65, NEMA 4x, NEMA 12 (when installed)
IP (at the front)	IP65
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
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
Use in hazardous areas	
• EX zone 2	Yes
• EX zone 22	Yes
• FM Class I Division 2	Yes

Ambient conditions

Ambient temperature in operation	
• Operating temperature range, min.	0 °C
• Operating temperature range, max.	50 °C
Storage/transport temperature	
• Min.	-20 °C
• max.	60 °C
Relative humidity	
• Operation, max.	90 %

Operating systems

Operating system	Windows CE
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Configuration

Configuration software	
• 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

<ul style="list-style-type: none"> • Configuration tool 	WinCC flexible Compact Version 2004 or higher (to be ordered separately)
<ul style="list-style-type: none"> • 2nd configuration kit <ul style="list-style-type: none"> — Version — Configuration tool — Type 	WinCC flexible Compact Version 2004 WinCC flexible Compact

Languages

Online languages

• Number of online/runtime languages	5
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Languages

• Languages per project	32
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Functionality under WinCC (TIA Portal)

Libraries	Yes
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Task planner	Yes
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Help system	Yes
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• Number of characters per info text	320
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Message system

• 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
• Message length (in characters)	80
• Number of process values per message	8
• Acknowledgment groups	
— Number of acknowledgement groups	Yes
• Message indicator	No
• Acoustic feedback	No
• First/last value	Yes

Recipe administration

• Number of recipes	100
• Data records per recipe	200
• Entries per data record	200
• Recipe memory	32 KB integrated Flash, expandable

Variables

• Number of variables per device	1 000
• Number of variables per screen	30
• Limit values	Yes
• Multiplexing	Yes
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	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
Complex image objects	
• dynamic objects	Bar graphs
• Number of bars per chart	5
• Limit value lines	Yes
• alphanumeric fields	1 000
• alphanumeric fields per image	30
• numerical fields	1 000
• numerical fields per image	30
• Password errors	0
• Number of analog indicators per image	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
Attributes for dynamic objects	
• Color change	Yes
• X/Y movement	No
• Hide	Yes
• Angle of turn	No
Lists	

• 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
Security	
• Number of user groups	50
• Number of user rights	32
• Password export/import	Yes
Logging through printer	
• Recording/Printing	Alarms, report (shift report), hardcopy
Transfer (upload/download)	
• Transfer of configuration	MPI/PROFIBUS DP, serial, USB, by means of external storage medium, automatic transfer recognition
Process coupling	
• 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	Yes
• Simulation	Yes
• Device switchover	Yes
• Delta transfer	Yes
• Monitoring function for battery and memory	No
• Trace (operation archive)	No

Expandability/openness

• Open Platform Program	No
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I/O / Options

I/O devices	Printer
• MultiMediaCard	Yes

Dimensions

Width of the housing front	150 mm
Height of housing front	186 mm
Mounting cutout, width	135 mm
Mounting cutout, height	171 mm
Device depth	38.5 mm

Weights

Weight (without packaging)	0.5 kg
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other

free hotline	Yes
Warranty period	1 y
last modified:	10.02.2015