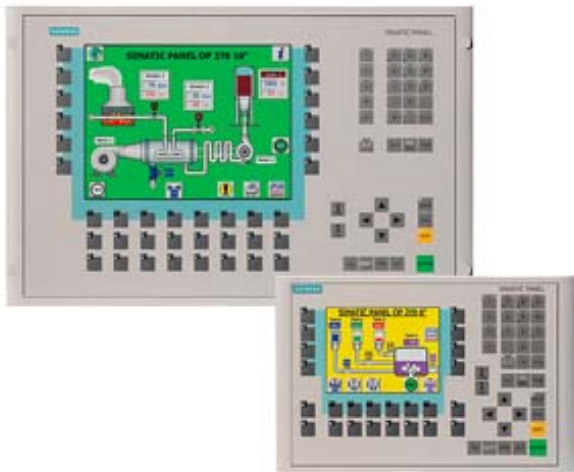


*** SPARE PART*** SIMATIC OP270 10" OPERATOR PANEL 10.4"
STN COLOR DISPLAY 2 MB CONFIGURING MEMORY,
CONFIGURABLE W. PROTOCOL FROM VERS. V6.0



Display	
Design of display	STN, 256 colors
Screen diagonal	10.4 in
Resolution (pixels)	
• Horizontal image resolution	640 Pixel
• Vertical image resolution	480 Pixel
Backlighting	
• MTBF backlighting (at 25 °C)	60 000 h
Control elements	
Control elements	Membrane keyboard
Keyboard fonts	
• Membrane keyboard	Yes
— user-definable label membrane keys	Yes
• Function keys	
— Number of function keys	36
— Number of function keys with LEDs	28
• System keys	
— Number of system keys	38

• Numeric keyboard	Yes
• alphanumeric keyboard	Yes
• hexadecimal keyboard	Yes
• Multi-key operation	Yes
Touch operation	
• Design as touch screen	No
Connection type	
• Connection for mouse/keyboard/barcode reader	USB / USB / USB
Special operator controls	
• Handwheel	No
Installation type/mounting	
Mounting position	vertical
maximum permissible angle of inclination without external ventilation	35°
Supply voltage	
UPS connectable (serial)	Yes
Input current	
Current consumption (rated value)	0.9 A
Processor	
Processor type	RISC 32-bit
Drives	
Diskette drive	No
CD-ROM	No
Hard disk	No
Memory	
Type of memory	Flash / RAM
Memory available for user data	2 048 kbyte
Battery	
Backup battery	
• Backup battery (optional)	Yes; optional 3.6 V
• Backup time, min.	3 y
Type of output	
Info LED	Yes
Power LED	No
Error LED	No
Time of day	
Clock	
• Type	Hardware clock, battery backup, synchronizable

- retentive
- synchronizable

Yes

Yes

Interfaces

Interfaces/bus type	2 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	Yes; 1 x USB
PC card slot	No
CF card slot	1 x CF card slot
Industrial Ethernet	
• Industrial Ethernet interface	No

Degree and class of protection

IP (at the front)	IP65
IP (rear)	IP20

Standards, approvals, certificates

Certifications	CE, GL, ABS, DNV, LRS, FM Class I Div. 2, UL, cULus, EX Zone 2/22, C-TICK
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Ambient conditions

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

Operating systems

pre-installed operating system	Windows CE
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Configuration

Configuration software	
• Configuration tool	ProTool Version 6 SP 3 or higher, or WinCC flexible Standard Version 2004 or higher (to be ordered separately)

Languages

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

Functionality under WinCC (TIA Portal)

Libraries	Yes
Number of Visual Basic Scripts	
• Debugging in the simulator	No
Task planner	Yes
Help system	Yes

• Number of characters per info text	70
• Number of tooltips	0
Message system	
• Number of alarm classes	32
• Number of messages	4 000
• Bit messages	Yes
— Number of bit messages	2 000
• Analog messages	Yes
— Number of analog messages	2 000
• Telegram message procedure Alarm S	Yes
• System messages HMI	Yes
• System messages PLC	No
• System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)	No
• Lines	1
• Number of characters per message	70
• Number of process values per message	8
• Acknowledgment groups	Yes
• Message indicator	Yes
• acoustic feedback	No
• First/last value	Yes
Recipe management	
• Number of recipes	300
• Data records per recipe	500
• Entries per data record	1 000
• Recipe memory	64 KB integrated Flash, expandable
Variables	
• Number of variables per device	2 048
• Number of variables per screen	200
• Type Date & Time	2 048
• Limit values	Yes
• Multiplexing	Yes
• Structures	Yes
Images	
• Number of configurable images	300
• 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

• Number of I/O fields per image	200
• Number of date/time fields	30
• Index of screen context	No
• Return	Yes
• Graphics object	Bit maps, icons, vector graphics
— Icons	1 000
— Icon (full screen)	0
Complex image objects	
• Status/control	With SIMATIC S7
• dynamic objects	Diagrams, bar graphs, invisible buttons
— Number of objects per project	500
— Number of curve diagrams per image	5
• Methods	Trend
• Bar graphs	
— Number of bars per chart	10
• Sliders	
— Number of slides per image	0
• Pointer instruments	
— Number of analog indicators per image	0
• Limit value lines	Yes
• Number of alphanumeric fields	1 000
— alphanumeric fields per image	100
• Number of numerical fields	1 000
— numerical fields per image	100
• Number of password fields	1 000
• Number of visible switches per project	1 000
— visible switches per image	100
— hidden switches per image	100
• Number of status switches per project	1 000
— Number of status switches per image	100
• Number of selector switches per project	1 000
— Selector switches per image	100
• Number of decade switches per project	0
— Decade switches per image	0
• Number of signal lamps per project	1 000
— Signal lamps per image	100
Attributes for dynamic objects	
• Color change	Yes
• X/Y movement	Yes
• Hide	Yes
Lists	

• Number of text lists per project	500
• Number of entries per text list	256
• Number of graphics lists per project	400
• Number of graphic lists per image	10
• Number of entries per graphics list	255
Archiving	
• Number of archives per device	20
• Number of measuring points per project	20
• Number of entries per archive	10 000
• Message archive	Yes
• Process value archive	Yes
• Archiving methods	Sequence archive, circular log, alarm log, process value archive
— Sequential archive	Yes
— Short-term archive	Yes
• Memory location	CF card, Ethernet
— PC card	No
— CF card	Yes
— USB memory	No
— Ethernet	Yes
• Data storage format	CSV file, readable, e.g. with MS Excel, MS Access
— CSV	Yes
— TXT	No
• external evaluation	Readable, e.g. with MS Excel, MS Access, etc.
• Size of archive	depending on free memory on ext. card/stick or on free hard disk space via network drive
• Online evaluation	via trends
— 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, serial, USB, Ethernet, automatic transfer recognition
Process coupling	

• Connection to controller	S5, S7-200, S7- 300/400, TI 505, Win AC, PC (TCP/IP), SINUMERIK, SIMOTION, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), Telemecanique (ADJUST), OMRON (LINK/Multilink), Modicon (Modbus), for further non-Siemens drivers, see section on "System interfaces"
• S7-200	Yes
— PPI (point-to-point)	Yes
— PPI network	No
— MPI	Yes
— PROFIBUS DP	Yes
• 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)	Yes
• Telemecanique (Uni-Telway)	Yes
• OMRON (LINK/Multilink)	Yes
• Modicon (Modbus)	Yes
• GE-Fanuc (SNP)	Yes

Functions

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

• Trace (operation archive)	No
Expandability/openness	
• Open Platform Program	Yes
Peripherals/Options	
Peripherals	Printer, barcode reader
Dimensions	
Width of the housing front	483 mm
Height of housing front	310 mm
Overall depth	55 mm
Weights	
Weight (without packaging)	6 kg
Other	
free hotline	Yes
Warranty period	1 y
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