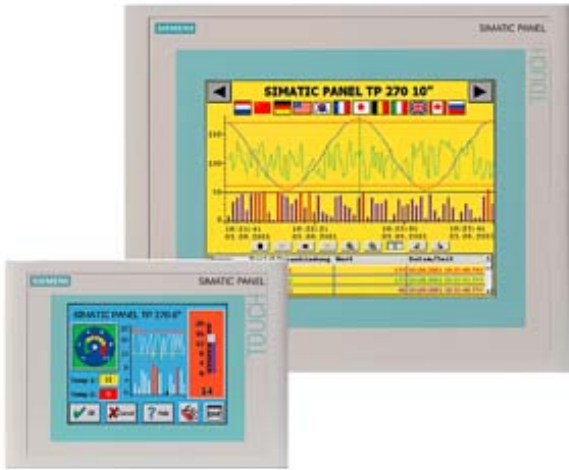


Spare part SIMATIC TP 270 10" Touch panel 10.4" STN color display 2 MB configuration memory, configurable with ProTool From Version V6.0



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	Touch screen
Keyboard fonts	
• Membrane keyboard	No
— user-definable label membrane keys	No
• Function keys	No
— Number of function keys with LEDs	0
• System keys	No
• Numeric keyboard	Yes
• alphanumeric keyboard	Yes

• hexadecimal keyboard	Yes
• Multi-key operation	No
Touch operation	
• Design as touch screen	Yes; analog, resistive
Connection type	
• Type of 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
Power	
Active power input, typ.	15 W
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	No
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
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • min. 	-20 °C
<ul style="list-style-type: none"> • max. 	60 °C
Relative humidity	
<ul style="list-style-type: none"> • Operation, max. 	85 %

Operating systems

pre-installed operating system	Windows CE
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Configuration

Configuration software	
<ul style="list-style-type: none"> • Configuration tool 	ProTool Version 6 SP 3 or higher, or WinCC flexible Standard Version 2004 or higher (to be ordered separately)

Languages

Online languages	
<ul style="list-style-type: none"> • Number of online/runtime languages 	5
Project languages	
<ul style="list-style-type: none"> • Languages per project 	32

Functionality under WinCC (TIA Portal)

Libraries	Yes
Number of Visual Basic Scripts	
<ul style="list-style-type: none"> • 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
• Number of variables	2 048
• 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 alphanumerical 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

• Angle of rotation	No
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 | Yes |
| • Touch calibration | Yes |
| • Backup/Restore manually | Yes |
| • Simulation | Yes |
| • Device switchover | Yes |
| • Delta transfer | Yes |

- Monitoring function for battery and memory
- Trace (operation archive)

Yes
No

Expandability/openness

- Open Platform Program

Yes

Peripherals/Options

Peripherals

Printer, barcode reader

Dimensions

Width of the housing front

335 mm

Height of housing front

275 mm

Overall depth

59 mm

Weights

Weight (without packaging)

4.5 kg

Other

free hotline

Yes

Warranty period

1 y

last modified:

02/27/2018