

Spare part SIMATIC Touch Panel TP170B Color STN-Color-
 Display MPI/PROFIBUS DP interface Printer/RS232 interface Slot for
 CF card configurable with ProTool/Lite as of Version V5.2+SP2



Display	
Design of display	STN, 16 colors
Screen diagonal	5.7 in
Resolution (pixels)	
• Horizontal image resolution	320 Pixel
• Vertical image resolution	240 Pixel
Backlighting	
• MTBF backlighting (at 25 °C)	50 000 h
Control elements	
Control elements	Touch screen
Keyboard fonts	
• 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

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Installation type/mounting

Mounting position	vertical
maximum permissible angle of inclination without external ventilation	35°

Input current

Current consumption (rated value)	0.25 A
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Power

Active power input, typ.	7 W
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Processor

Processor type	RISC 32-bit, 66 MHz
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Drives

Diskette drive	No
CD-ROM	No
Hard disk	No

Memory

Type of memory	Flash / RAM
Memory available for user data	768 kbyte

Time of day

Clock	
• Type	Software clock, synchronizable, no battery backup
• retentive	No
• synchronizable	Yes

Interfaces

Interfaces/bus type	TTY optional, 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
CF card slot	1 x CF card slot

Degree and class of protection

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

Standards, approvals, certificates

Certifications	CE, FM Class I Div. 2, UL, CSA
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Ambient conditions

Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C

Relative humidity	
• Operation, max.	85 %
Operating systems	
pre-installed operating system	Windows CE
Configuration	
Configuration software	
• Configuration tool	ProTool / Lite, Version 5.2 SP 2 or higher or WinCC flexible Compact 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
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	2 000
• Bit messages	Yes
— Number of bit messages	2 000
• Analog messages	Yes
— Number of analog messages	2 000
• Telegram message procedure Alarm S	No
• System messages HMI	Yes
• System messages PLC	No
• System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)	No
• Lines	1
• Number of characters per message	80
• Number of process values per message	8
• Acknowledgment groups	
— Number of acknowledgement groups	99
• Message indicator	Yes
• acoustic feedback	No
• First/last value	Yes
Recipe management	
• 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	50
• Number of variables	1 000
• Initial values	1 000
• Type Date & Time	1 000
• Limit values	Yes
• Multiplexing	Yes
• Structures	No
Images	
• Number of configurable images	100
• Permanent window/default	Yes
• Start screen configurable	Yes
• Image selection by PLC	Yes
• Image number in the PLC	Yes
Image objects	
• Text objects	2,000 text elements
• Number of I/O fields per image	0
• Number of date/time fields	30
• Index of screen context	No
• Return	Yes
• Graphics object	Bit maps, icons, icon (full-screen)
— Icons	500
— Icon (full screen)	50
Complex image objects	
• Status/control	Not possible
• 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	5
• 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
• Angle of rotation	No
Lists	
• Number of text lists per project	300
• Number of text lists per image	10
• Number of entries per text list	256
• Number of graphics lists per project	100
• Number of graphic lists per image	10
• Number of entries per graphics list	255
Security	
• Number of user groups	10
• Password export/import	Yes
Data carrier support	
• PC card	No
• CF card	Yes
• Diskette drive	No
• Hard disk	No
• CD-ROM	No
Logging through printer	
• Recording/Printing	Alarms, report (shift report), color print
Transfer (upload/download)	
• Transfer of configuration	MPI/PROFIBUS DP, serial, automatic transfer recognition
Process coupling	

• Connection to controller	S5, S7-200, S7- 300/400, TI 505, Win AC, SINUMERIK, SIMOTION, Allen Bradley (DF1), Mitsubishi (FX), Telemecanique (ADJUST), 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)	No
• Mitsubishi (FX)	Yes
• Mitsubishi (MP4)	Yes
• Telemecanique (ADJUST)	Yes
• Telemecanique (Uni-Telway)	Yes
• OMRON (LINK/Multilink)	No
• 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	Yes
• Trace (operation archive)	No

Expandability/openness

- Open Platform Program Yes

Peripherals/Options

Peripherals	Printer
• SIMATIC HMI MM memory card: Multi Media Card	No
• SIMATIC HMI SD memory card: Secure Digital memory card	No
• USB memory	No

Dimensions

Width of the housing front	212 mm
Height of housing front	156 mm
Overall depth	45 mm

Weights

Weight (without packaging)	0.7 kg
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Other

free hotline	Yes
Warranty period	1 y

last modified: 02/27/2018