

\*\*\* SPARE PART\*\*\* SIMATIC TOUCHPANEL TP170B COLOR STN  
 COLOR DISPLAY MPI-/PROFIBUS-DP INTERFACE  
 PRINTER/RS232 INTERFACE SLOT FOR CF-CARD  
 CONFIGURABLE WITH PROTOOL/LITE FROM VERSION  
 V5.2+SP2



Display	
Design of display	STN, 16 colors
Screen diagonal	5.7 in
Color type	Colors
Resolution (pixels)	
• Horizontal image resolution	320 Pixel
• Vertical image resolution	240 Pixel
• Resolution (WxH in pixel)	320 x 240
Backlighting	
• MTBF backlighting (at 25 °C)	50 000 h
Control elements	
Control elements	Touch screen
Keyboard fonts	
• Numeric/alphabetical input	Yes / Yes
— hexadecimal keyboard	Yes
• Multi-key operation	No
Touch operation	
• Design as touch screen	Yes; analog, resistive

<b>Connection type</b>	
• Connection for mouse/keyboard/barcode reader	- / - / -
<b>Installation type/mounting</b>	
Mounting position	vertical
maximum permissible angle of inclination without external ventilation	35°
<b>Input current</b>	
Current consumption (rated value)	0.25 A
<b>Power</b>	
Power consumption, typ.	7 W
<b>Processor</b>	
Processor type	RISC 32-bit, 66 MHz
<b>Drives</b>	
Diskette drive	No
CD-ROM	No
Hard disk	No
<b>Memory</b>	
Type of memory	Flash / RAM
Memory available for user data	768 kbyte
<b>Time of day</b>	
Clock	
• Type	Software clock, synchronizable, no battery backup
• retentive	No
• synchronizable	Yes
<b>Interfaces</b>	
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
<b>Degree and class of protection</b>	
Front	IP65
IP (at the front)	IP65
IP (rear)	IP20
<b>Standards, approvals, certificates</b>	
Certifications	CE, FM Class I Div. 2, UL, CSA
<b>Ambient conditions</b>	
Ambient temperature during storage/transportation	
• min.	-20 °C

• max.	60 °C
<b>Relative humidity</b>	
• Operation, max.	85 %

### Operating systems

Operating system	Windows CE
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### 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)
• 1. Configuration kit	ProTool / Lite
— Version	Version 5.2 SP 2
— Configuration tool	ProTool
— Type	Lite
• 2. Configuration kit	WinCC flexible Compact
— Version	Version 2004
— Configuration tool	WinCC flexible
— Type	Compact

### Languages

#### Online languages

• Number of online/runtime languages	5
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#### Project 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	70
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• Number of tooltips	0
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#### Message system

• Number of alarm classes	32
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• Number of messages	2 000
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• Bit messages	Yes
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— Number of bit messages	2 000
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• Analog messages	Yes
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— Number of analog messages	2 000
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• Telegram message procedure Alarm S	No
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• System messages HMI	Yes
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• System messages PLC	No
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• System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)	No
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• Message length (in characters)	80
• Lines	1
• Number of process values per message	8
• Acknowledgment groups	
— Number of acknowledgement groups	99
• Message indicator	Yes
• acoustic feedback	No
• First/last value	Yes
<b>Recipe administration</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	50
• Number of variables	1 000
• Initial values	1 000
• Limit values	Yes
• Multiplexing	Yes
• Structures	No
• Type Date & Time	1 000
<b>Images</b>	
• Number of configurable images	100
• 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	2,000 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
<b>Complex image objects</b>	
• 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
• Limit value lines	Yes
• Number of bars per chart	5
• Limit value lines	Yes
• alphanumeric fields	1 000
• alphanumeric fields per image	100
• numerical fields	1 000
• numerical fields per image	100
• Password fields	1 000
• Number of slides per image	0
• Number of analog indicators per image	0
• 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
<b>Attributes for dynamic objects</b>	
• Color change	Yes
• X/Y movement	Yes
• Hide	Yes
• Angle of rotation	No
<b>Lists</b>	
• 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
<b>Security</b>	
• Number of user groups	10
• Password export/import	Yes
<b>Data carrier support</b>	
• PC card	No
• CF card	Yes

• Diskette drive	No
• Hard disk	No
• CD-ROM	No
<b>Logging through printer</b>	
• Recording/Printing	Alarms, report (shift report), color print
<b>Transfer (upload/download)</b>	
• Transfer of configuration	MPI/PROFIBUS DP, serial, automatic transfer recognition
<b>Process coupling</b>	
• 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
<b>Functions</b>	
• Key repeat	No
• TAB sequence	Yes
• Calculating functions	Yes
• Animate	Yes
• Menu tree editor	No
• Unit switchover	No
<b>Service tools/configuration aids</b>	

- Clean screen
- Touch calibration
- Backup/Restore manually
- Simulation
- Device switchover
- Delta transfer
- Monitoring function for battery and memory
- Trace (operation archive)

Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
Yes  
No

#### Expandability/openness

- Open Platform Program

Yes

#### Peripherals/Options

##### Peripherals

- SIMATIC HMI MM memory card: Multi Media Card
- SIMATIC HMI SD memory card: Secure Digital memory card
- USB memory

Printer  
No  
No  
No

#### Dimensions

Width of the housing front	212 mm
Height of housing front	156 mm

#### Weights

Weight (without packaging)	0.7 kg
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#### Other

free hotline	Yes
Warranty period	1 y

**last modified:** 17.03.2016