



SIMATIC TOUCH PANEL TP 177A 5,7" BLUE MODE STN-DISPLAY, MPI/PROFIBUS-DP INTERFACE, CONFIGURABLE WINCC FLEXIBLE 2004 COMPACT HSP UPWARDS; CONTAINS OPEN-SOURCE-SW, WHICH IS PROVIDED FREE OF CHARGE. FOR DETAILS SEE ENCLOSED CD

Display	
Design of display	STN
Screen diagonal	5.7 in
Number of colors	4
Color type	Blue levels
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	
• Keys with LED	No; 0
• System keys	No
• Numeric/alphabetical input	Yes / Yes
— hexadecimal keyboard	Yes
• Multi-key operation	No
Touch operation	
• Design as touch screen	Yes; analog, resistive
Connection type	
• Connection for mouse/keyboard/barcode reader	- / - / -

Installation type/mounting	
Mounting position	vertical
maximum permissible angle of inclination without external ventilation	35°
Supply voltage	
Type of supply voltage	DC
Input current	
Current consumption (rated value)	0.24 A
Starting current inrush I ² t	0.5 A ² ·s
Power	
Power consumption, typ.	6 W
Processor	
Processor type	ARM
Memory	
Type of memory	Flash / RAM
Usable memory for user data	512 kbyte
Type of output	
Info LED	No
Power LED	No
Error LED	No
Time of day	
Clock	
<ul style="list-style-type: none"> Type 	Software clock, no battery backup
<ul style="list-style-type: none"> Hardware clock (real-time clock) 	No
<ul style="list-style-type: none"> Software clock 	Yes
<ul style="list-style-type: none"> Battery-backed 	No
<ul style="list-style-type: none"> Synchronizable 	No
Interfaces	
Interface/bus type	1 x RS422, 1 x RS485 (max. 1.5 Mbit/s)
Number of RS 485 interfaces	1
<ul style="list-style-type: none"> Transmission rate, max. 	1.5 Mbit/s
USB port	No
PC card slot	No
CF card slot	No
Multi Media Card slot	No
Special interfaces	No
Industrial Ethernet	
<ul style="list-style-type: none"> Industrial Ethernet interface 	No
Degree and class of protection	

Front	IP65, NEMA 4x (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
cULus	Yes
EAC (formerly Gost-R)	No
Suitable for safety functions	No

Marine approval

<ul style="list-style-type: none"> • Germanischer Lloyd (GL) 	Yes
<ul style="list-style-type: none"> • American Bureau of Shipping (ABS) 	Yes
<ul style="list-style-type: none"> • Bureau Veritas (BV) 	Yes
<ul style="list-style-type: none"> • Det Norske Veritas (DNV) 	Yes
<ul style="list-style-type: none"> • Lloyds Register of Shipping (LRS) 	Yes
<ul style="list-style-type: none"> • Nippon Kaiji Kyokai (Class NK) 	Yes
<ul style="list-style-type: none"> • Polski Rejestr Statkow (PRS) 	No

Use in hazardous areas

<ul style="list-style-type: none"> • EX zone 2 	Yes
<ul style="list-style-type: none"> • EX zone 22 	Yes
<ul style="list-style-type: none"> • FM Class I Division 2 	Yes

Ambient conditions

Ambient temperature in operation	
<ul style="list-style-type: none"> • Min. 	0 °C
<ul style="list-style-type: none"> • max. 	50 °C
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. 	90 %

Operating systems

Operating system	LINUX
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Configuration

Message indicator	Yes
Alarm logging system (incl. buffer and acknowledgment)	Yes
Configuration software	
<ul style="list-style-type: none"> • STEP 7 Basic (TIA Portal) 	No
<ul style="list-style-type: none"> • STEP 7 Professional (TIA Portal) 	No
<ul style="list-style-type: none"> • 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
• Configuration tool	WinCC flexible Compact Version 2004 SP1 or higher (to be ordered separately)
• 2nd configuration kit	WinCC flexible Compact
— Version	Version 2004 SP 1
— Configuration tool	WinCC flexible
— Type	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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Number of Visual Basic Scripts

• Debugging in the simulator	No
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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	1 000
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• Bit messages	Yes
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— Number of bit messages	1 000
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• Analog messages	Yes
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— Number of analog messages	20
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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	Yes
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• System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)	No
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• Message length (in characters)	80
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• Lines	1
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• Number of process values per message	8
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• Acknowledgment groups	
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— Number of acknowledgement groups	Yes
• Message indicator	Yes
• Acoustic feedback	No
• First/last value	Yes
Recipe administration	
• Number of recipes	5
• Data records per recipe	20
• Entries per data record	20
• Recipe memory	32 KB integrated Flash
Variables	
• Number of variables per device	500
• Number of variables per screen	30
• Limit values	Yes
• Multiplexing	Yes
• Structs	No
Images	
• Number of configurable images	250
• Permanent window/default	Yes
• Start screen configurable	Yes
• Image selection by PLC	Yes
• Image number in the PLC	Yes
Image objects	
• Text objects	1,000 text elements
• Number of I/O fields per image	30
• Index of screen context	No
• Return	No
• Graphics object	Bit maps, icons, icon (full-screen), vector graphics
— Icons	1
— Icon (full screen)	1
Complex image objects	
• Status/control	Not possible
• dynamic objects	Diagrams, bar graphs
• Number of bars per chart	5
• Limit value lines	Yes
Attributes for dynamic objects	
• Color change	No
• X/Y movement	No
• Hide	Yes
• Angle of turn	No
Lists	
• Number of text lists per project	300

• Number of graphics lists per project	100
Security	
• Number of user groups	50
• Number of user rights	32
• Password export/import	Yes
Data carrier support	
• PC card	No
• CF card	No
Transfer (upload/download)	
• Transfer of configuration	MPI/PROFIBUS DP, serial, automatic transfer recognition
Process coupling	
• Connection to controller	S7-200, S7- 300/400, Win AC see section on "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	No
— serial	No
— PROFIBUS DP	No
• TI 505	No
• Allen Bradley (DF1)	No
• Allen Bradley (DF485)	No
• Mitsubishi (FX)	No
• Mitsubishi (MP4)	No
• Telemecanique (ADJUST)	No
• Telemecanique (Uni-Telway)	No
• OMRON (LINK/Multilink)	No
• Modicon (Modbus)	No
• GE-Fanuc (SNP)	No
Functions	
• Key repeat	No
• TAB sequence	Yes
• Calculating functions	Yes
• Animate	No
• Menu tree editor	No

• Unit switchover	No
Service tools/configuration aids	
• Clean screen	Yes
• Touch calibration	Yes
• Backup/restore	Yes
• Simulation	Yes
• Device switchover	Yes
• Delta transfer	No
• Monitoring function for battery and memory	No
• Trace (operation archive)	No
Expandability/openness	
• Open Platform Program	No
I/O / Options	
I/O devices	
• MultiMediaCard	No
Dimensions	
Width of the housing front	212 mm
Height of housing front	156 mm
Mounting cutout, width	198 mm
Mounting cutout, height	142 mm
Device depth	44 mm
Weights	
Weight (without packaging)	0.75 kg
other	
free hotline	Yes
Warranty period	1 y
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