

SIMATIC TP177B 6" DP BLUE MODE STN-DISPLAY MPI- /PROFIBUS-DP PROTOCOL RS485-/RS422-/USB INTERFACE PRINTER - INTERFACE SLOT FOR MMCARD CONFIGURABLE WITH WINCC FLEXIBLE 2005 ***** AS OF 2015-01-01 THE PRODUCT IS BLOCKED FOR DELIVERY AND IS NO LONGER AVAILABLE AS A NEW PART. INFORMATION ABOUT SUCCESSOR IS BLOCKED FOR DELIVERY FOR FURTHER QUESTIONS PLEASE APPROACH YOUR SIEMENS CONTACT PERSON.

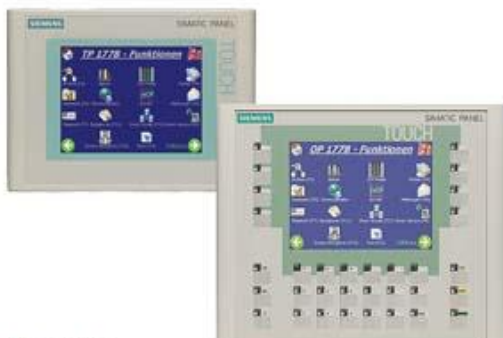


Figure similar

General information	
Customer-specific configuration	Yes
Display	
Design of display	STN
Screen diagonal	5.7 in
Number of colors	4
Number of grayscales	4
Color type	Blue levels
Resolution (pixels)	
• Horizontal image resolution	320
• Vertical image resolution	240
• Resolution (WxH in pixel)	320 x 240
Backlighting	
• MTBF backlighting (at 25 °C)	50 000 h
Control elements	
Control elements	Touch screen
Keyboard	
• Membrane keyboard	No
• System keys	Yes
• Numeric/alphabetical input	Yes / Yes
— hexadecimal keyboard	Yes
• Multi-key operation	No
Touch operation	
• Design as touch screen	Yes; analog, resistive

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
Inrush current A ² s	0.5 A ² s
Processor	
Processor type	ARM, 200 MHz
Memory	
Type of memory	Flash / RAM
Usable memory for user data	2 048 kbyte
Time of day	
Clock	
<ul style="list-style-type: none"> • Type • Hardware clock (real-time clock) • Software clock • Battery-backed • Synchronizable 	<ul style="list-style-type: none"> Hardware clock, synchronizable, no battery backup No Yes No Yes
Interfaces	
Interface/bus type	RS232 optional, 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	1 x USB
PC card slot	No
CF card slot	No
Multimedia card/SD card slot	combined, from E-status 016 in connection with WinCC flexible 2008 SP1, MMC max. 128 MB / SD max. 512 MB
Special interfaces	No
Industrial Ethernet	
<ul style="list-style-type: none"> • Industrial Ethernet interface • Industrial Ethernet status LED 	<ul style="list-style-type: none"> No 0
Protocols (terminal link)	
<ul style="list-style-type: none"> • Sm@rtService 	Yes
Degree and class of protection	
Front	IP65, NEMA 4x, NEMA 12 (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, EX Zone 22, C-TICK, NEMA 4x, NEMA 12
cULus	Yes
EAC (formerly Gost-R)	No
Suitable for safety functions	No

Marine approval

• Germanischer Lloyd (GL)	Yes
• American Bureau of Shipping (ABS)	Yes
• Bureau Veritas (BV)	Yes
• Det Norske Veritas (DNV)	Yes
• Lloyds Register of Shipping (LRS)	Yes
• Polski Rejestr Statkow (PRS)	No

Use in hazardous areas

• EX zone 2	Yes
• EX zone 22	Yes
• FM Class I Division 2	Yes

Ambient conditions

Ambient temperature in operation

• Min.	0 °C
• max.	50 °C

Storage/transport temperature

• Min.	-20 °C
• max.	60 °C

Relative humidity

• Operation, max.	90 %
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Operating systems

Operating system	Windows CE
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Configuration

Message indicator	Yes
Alarm logging system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes
Recipe administration	Yes

Configuration software

• STEP 7 Basic (TIA Portal)	No
• STEP 7 Professional (TIA Portal)	No
• 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 2005 or higher (to be ordered separately)
• 2nd configuration kit	WinCC flexible Compact
— Version	Version 2005
— 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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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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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	50
• Telegram message procedure Alarm S	No
• System messages HMI	Yes
• System messages PLC	Yes
• System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)	No
• 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

Recipe administration

• 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
• Limit values	Yes
• Multiplexing	Yes
• Structs	No
• Type Date & Time	1 000
Images	
• Number of configurable images	500
• Permanent window/default	Yes
• Start screen configurable	Yes
• Image selection by PLC	Yes
• Image number in the PLC	Yes
Image objects	
• Text objects	2,500 text elements
• Number of I/O fields per image	50
• Number of date/time fields	30
• Index of screen context	No
• Return	Yes
• Graphics object	Bit maps, icons, icon (full-screen), vector graphics
— Icons	500
— Icon (full screen)	50
Complex image objects	
• Status/control	With SIMATIC S7
• dynamic objects	Diagrams, bar graphs, sliders, analog display, invisible buttons
— Number of objects per project	500
— Number 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 errors	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
• Button 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 turn	No
Lists	
• Number of text lists per project	300
• Number of text lists per image	10
• Number of entries per text list	30
• Number of graphics lists per project	100
• Number of graphic lists per image	10
• Number of entries per graphics list	30
Security	
• Number of user groups	50
• Number of user rights	32
• Password export/import	Yes
Data carrier support	
• PC card	No
• CF card	No
Logging through printer	
• Recording/Printing	Alarms, report (shift report), hardcopy
Transfer (upload/download)	
• Transfer of configuration	MPI/PROFIBUS DP, serial, USB, by means of external storage medium, automatic transfer recognition
Process coupling	

• Connection to controller	S5, S7-200, S7- 300/400, Win AC, SINUMERIK, SIMOTION, Allen Bradley (DF1), Mitsubishi (FX), Telemecanique (ADJUST), Modicon (Modbus), for further non-Siemens drivers, see section on "System interfaces"
• S7-1200	Yes
• S7-1500	No
• S7-200	Yes
— PPI (point-to-point)	Yes
— PPI network	No
— MPI	Yes
— PROFIBUS DP	Yes
— Ethernet	No
• S7-300/400	Yes
— MPI	Yes
— PROFIBUS DP	Yes
— PROFINET	No
• S5	Yes; only PROFIBUS DP
— serial	No
— PROFIBUS DP	Yes
• TI 505	No
• Allen Bradley (DF1)	Yes
• Allen Bradley (DF485)	Yes
• Mitsubishi (FX)	Yes
• Telemecanique (ADJUST)	No
• Telemecanique (Uni-Telway)	Yes; Only in combination with WinCC flexible
• OMRON (LINK/Multilink)	Yes
• Modicon (Modbus)	Yes

Functions

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

Service tools/configuration aids

• Clean screen	Yes
• Touch calibration	Yes
• Backup/restore	Yes
• Simulation	Yes
• Device switchover	Yes
• Delta transfer	Yes
• Monitoring function for battery and memory	No

• Trace (operation archive)	No
Expandability/openness	
• Open Platform Program	Yes
I/O / Options	
I/O devices	Printer
• MultiMediaCard	Yes
Additional software components loadable	Yes
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)	0.8 kg
other	
free hotline	Yes
Warranty period	1 y
last modified:	11.02.2015