



SIMATIC TOUCHPANEL TP177B PN/DP STAINLESS STEEL FRONT,  
 DISPLAY COVERED BY MEMBRANE,  
 PROTECTION CLASS FRONT IP66K,  
 STN 265 COLOR-DISPLAY,  
 MPI-/PROFIBUS-DP - PROTOCOL,  
 RS485-/RS422-/USB - INTERFACE,  
 ETHERNET 10/100 INTERFACE,  
 PRINTER-INTERFACE, SLOT FOR MM-CARD

General information	
Customer-specific configuration	No
Display	
Design of display	STN
Screen diagonal	5.7 in
Size	5.7" (120 mm x 90 mm)
Display type	STN, 256 colors
Color type	Colors
Resolution (pixels)	
Horizontal image resolution	320
Vertical image resolution	240
Resolution (WxH in pixel)	320 x 240
Backlighting	
MTBF backlighting (at 25 °C)	about 50,000 hours
Control elements	
Control elements	Touch screen
Operating options	Touch
Connection for mouse/keyboard/barcode reader	USB / USB / USB
Keyboard fonts	

<b>System keys</b>	Yes
<b>Numeric/alphabetical input</b>	Yes / Yes
<b>hexadecimal keyboard</b>	Yes
<b>Multi-key operation</b>	No
<b>Touch operation</b>	
<b>Touch screen</b>	Analog, resistive
<b>Input current</b>	
<b>Rated current</b>	0.24 A
<b>Processor</b>	
<b>Processor</b>	ARM, 200 MHz
<b>Processor type</b>	ARM
<b>Memory</b>	
<b>Type</b>	Flash / RAM
<b>Usable memory for user data</b>	2048 KB usable memory for user data
<b>Time of day</b>	
<b>Clock</b>	
<b>Type</b>	Hardware clock, synchronizable, no battery backup
<b>Hardware clock (real-time clock)</b>	Yes
<b>Software clock</b>	No
<b>Battery-backed</b>	No
<b>Synchronizable</b>	Yes
<b>Interfaces</b>	
<b>Interfaces</b>	RS232 optional, 1 x RS422, 1 x RS485, 1 x Ethernet (RJ45) (max. 12 Mbit/s)
<b>Number of RS 485 interfaces</b>	1
<b>Transmission rate, max.</b>	12 Mbit/s
<b>USB port</b>	1 x USB
<b>PC card slot</b>	No
<b>CF card slot</b>	No
<b>Special interfaces</b>	No
<b>Industrial Ethernet</b>	
<b>Industrial Ethernet interface</b>	1 x Ethernet (RJ45)
<b>Industrial Ethernet status LED</b>	1
<b>Protocols</b>	
<b>Protocols (terminal link)</b>	
<b>Sm@rtService</b>	Yes
<b>Degree and class of protection</b>	
<b>Front</b>	IP66K, NEMA 4, NEMA 4x, NEMA 12 (when installed)
<b>IP (at the front)</b>	IP66K

<b>NEMA</b>	NEMA 4, NEMA 4x, NEMA 12
<b>Rear</b>	IP20
<b>IP (rear)</b>	IP20
<b>Standards, approvals, certificates</b>	
<b>Certifications</b>	CE, GL, ABS, BV, DNV, LRS, PRS, FM Class I Div. 2, UL, CSA, cULus, EX-Zone 2/22, Gost-R, C-TICK, NEMA 4, NEMA 4x, NEMA 12
<b>cULus</b>	Yes
<b>Gost-R</b>	Yes
<b>SIBE safety certification</b>	No
<b>Marine approval</b>	
<b>GL</b>	Yes
<b>ABS</b>	Yes
<b>BV</b>	Yes
<b>DNV</b>	Yes
<b>LRS</b>	Yes
<b>Class NK</b>	No
<b>PRS</b>	Yes
<b>Use in hazardous areas</b>	
<b>EX zone 2</b>	Yes
<b>EX zone 22</b>	Yes
<b>FM Class I Division 2</b>	Yes
<b>Ambient conditions</b>	
<b>Mounting position</b>	vertical
<b>maximum permissible angle of inclination without external ventilation</b>	+/- 35 °
<b>Storage/transport temperature</b>	
<b>Transport, storage</b>	-20 °C to +60 °C
<b>Relative humidity</b>	
<b>max. relative humidity</b>	90 %
<b>Operating systems</b>	
<b>Operating system</b>	Windows CE
<b>Configuration</b>	
<b>Message indicator</b>	Yes
<b>With alarm logging system (incl. buffer and acknowledgment)</b>	Yes
<b>Process value display (output)</b>	Yes
<b>Process value default (input) possible</b>	Yes
<b>Recipe administration</b>	Yes
<b>Configuration software</b>	

<b>STEP 7 Basic (TIA Portal)</b>	No
<b>STEP 7 Professional (TIA Portal)</b>	No
<b>WinCC flexible Compact</b>	Yes
<b>WinCC flexible Standard</b>	Yes
<b>WinCC flexible Advanced</b>	Yes
<b>WinCC Basic (TIA Portal)</b>	No
<b>WinCC Comfort (TIA Portal)</b>	Yes
<b>WinCC Advanced (TIA Portal)</b>	Yes
<b>WinCC Professional (TIA Portal)</b>	Yes
<b>Configuration tool</b>	WinCC flexible Compact Version 2005 or higher (to be ordered separately)
<b>2nd configuration kit</b>	WinCC flexible Compact
<b>Version</b>	Version 2005
<b>Configuration tool</b>	WinCC flexible
<b>Type</b>	Compact
<b>Languages</b>	
<b>Online languages</b>	
<b>Number of online/runtime languages</b>	5
<b>Languages</b>	
<b>Languages per project</b>	32
<b>Functionality under WinCC (TIA Portal)</b>	
<b>Libraries</b>	Yes
<b>Task planner</b>	Yes
<b>Help system</b>	Yes
<b>Number of characters per info text</b>	70
<b>Message system</b>	
<b>Number of alarm classes</b>	32
<b>Number of messages</b>	2000
<b>Bit messages</b>	Yes
<b>Analog messages</b>	Yes
<b>Number of bit messages</b>	2000
<b>Number of analog messages</b>	2000
<b>System messages HMI</b>	Yes
<b>System messages PLC</b>	Yes
<b>Message length (in characters)</b>	80
<b>Lines</b>	1
<b>Number of process values per message</b>	8
<b>Acknowledgment groups</b>	99
<b>Message indicator</b>	Yes

<b>Acoustic feedback</b>	No
<b>First/last value</b>	Yes
<b>Recipe administration</b>	
<b>Number of recipes</b>	100
<b>Data records per recipe</b>	200
<b>Entries per data record</b>	200
<b>Recipe memory</b>	32 KB integrated Flash, expandable
<b>Variables</b>	
<b>Number of variables per device</b>	1000
<b>Number of variables per screen</b>	50
<b>Number of variables</b>	1000
<b>Initial values</b>	1000
<b>Limit values</b>	Yes
<b>Multiplexing</b>	Yes
<b>Structs</b>	No
<b>Type Date &amp; Time</b>	1000
<b>Images</b>	
<b>Number of configurable images</b>	500
<b>Permanent window/default</b>	Yes
<b>Start screen configurable</b>	Yes
<b>Image selection by PLC</b>	Yes
<b>Image number in the PLC</b>	Yes
<b>Image objects</b>	
<b>Text objects</b>	2,500 text elements
<b>Fields per image</b>	50
<b>Date/time fields</b>	30
<b>Index of screen context</b>	No
<b>Return</b>	Yes
<b>Graphics object</b>	Bit maps, icons, icon (full-screen), vector graphics
<b>Icons</b>	500
<b>Icon (full screen)</b>	50
<b>Complex image objects</b>	
<b>Status/control</b>	With SIMATIC S7
<b>dynamic objects</b>	Diagrams, bar graphs, sliders, analog display, invisible buttons
<b>Number of objects per project</b>	500
<b>Number per image</b>	5
<b>Methods</b>	Trend
<b>Limit value lines</b>	Yes
<b>Number of bars per chart</b>	5

Limit value lines	Yes
alphanumeric fields	1000
alphanumeric fields per image	100
numerical fields	1000
numerical fields per image	100
Password errors	1000
Number of slides per image	0
Number of analog indicators per image	0
Number of visible switches per project	1000
visible switches per image	100
hidden switches per image	100
Number of status switches per project	1000
Button status switches per image	100
Number of selector switches per project	1000
Selector switches per image	100
Number of decade switches per project	0
Decade switches per image	0
Number of signal lamps per project	1000
Signal lamps per image	100
<b>Attributes for dynamic objects</b>	
Color change	Yes
X/Y movement	Yes
Hide	Yes
Angle of turn	No
<b>Lists</b>	
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
<b>Security</b>	
Number of user groups	50
Number of user rights	32
Password export/import	Yes
<b>Data carrier support</b>	
PC card	No
CF card	No
<b>Logging through printer</b>	

<b>Recording/Printing</b>	Alarms, report (shift report), color print, hardcopy
<b>Transfer (upload/download)</b>	
<b>Transfer of configuration</b>	MPI/PROFIBUS DP, serial, USB, Ethernet, by means of external storage medium, automatic transfer recognition
<b>Process coupling</b>	
<b>Connection to controller</b>	S5, S7-200, S7-300/400, Win AC, PC (TCP/IP), SINUMERIK, SIMOTION, Allen Bradley (DF1), Mitsubishi (FX), Telemecanique (ADJUST), Modicon (Modbus), further non-Siemens drivers, see chapter "System interfaces"
<b>S7-1200</b>	Yes
<b>S7-1500</b>	No
<b>S7-200</b>	Yes
<b>PPI (point-to-point)</b>	Yes
<b>PPI network</b>	No
<b>MPI</b>	Yes
<b>PROFIBUS DP</b>	Yes
<b>Ethernet</b>	Yes
<b>S7-300/400</b>	Yes
<b>MPI</b>	Yes
<b>PROFIBUS DP</b>	Yes
<b>PROFINET</b>	Yes
<b>S5</b>	Yes ; only PROFIBUS DP
<b>serial</b>	No
<b>PROFIBUS DP</b>	Yes
<b>TI 505</b>	No
<b>Allen Bradley (DF1)</b>	Yes
<b>Allen Bradley (DF485)</b>	Yes
<b>Mitsubishi (FX)</b>	Yes
<b>Telemecanique (ADJUST)</b>	No
<b>OMRON (LINK/Multilink)</b>	Yes
<b>Modicon (Modbus)</b>	Yes
<b>Functions</b>	
<b>Key repeat</b>	No
<b>TAB sequence</b>	Yes
<b>Calculating functions</b>	Yes
<b>Animate</b>	Yes
<b>Menu tree editor</b>	Yes
<b>Unit switchover</b>	No
<b>Service tools/configuration aids</b>	
<b>Clean screen</b>	Yes

<b>Touch calibration</b>	Yes
<b>Backup/restore</b>	Yes
<b>Simulation</b>	Yes
<b>Device switchover</b>	Yes
<b>Delta transfer</b>	Yes
<b>Monitoring function for battery and memory</b>	Yes
<b>Trace (operation archive)</b>	No
<b>Expandability/openness</b>	
<b>Open Platform Program</b>	Yes
<b>I/O/Options</b>	
<b>I/O devices</b>	Printer
<b>Multi Media Card</b>	Yes
<b>Additional software components loadable</b>	Yes
<b>Dimensions</b>	
<b>Front of enclosure (W x H)</b>	212 mm x 156 mm
<b>Mounting cutout/device depth (W x H / D)</b>	198 mm x 142 mm / 44 mm device depth
<b>Weights</b>	
<b>Weight (without packaging)</b>	0.9 kg
<b>other</b>	
<b>free hotline</b>	Yes
<b>Warranty period</b>	1 a
Status	Mar 29, 2014