

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



General information	
<b>Product function</b>	
Customer-specific configuration	Yes
<b>Display</b>	
Design of display	STN
Screen diagonal	5.7 in
Size	5.7" (120 mm x 90 mm)
Display type	STN, 4 blue levels
Number of grayscales	4
Color type	Blue levels
<b>Resolution (pixels)</b>	
Horizontal image resolution	320
Vertical image resolution	240
Resolution (WxH in pixel)	320 x 240
<b>Backlighting</b>	
MTBF backlighting (at 25 °C)	about 50000 hours
<b>Control elements</b>	
Control elements	Touch screen
Operating options	Touch

<b>Connection for mouse/keyboard/barcode reader</b>	USB / USB / USB
<b>Keyboard fonts</b>	
<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>Supply voltage</b>	
<b>Supply voltage</b>	24 V DC
<b>Input current</b>	
<b>Rated current</b>	0.24 A
<b>Inrush current A<sup>2</sup>s</b>	0.5 A <sup>2</sup> s
<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>Interfaces</b>	
<b>Interfaces</b>	RS232 optional, 1 x RS422, 1 x RS485 (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>Multimedia card/SD card slot</b>	combined
<b>Special interfaces</b>	No
<b>Industrial Ethernet</b>	
<b>Industrial Ethernet interface</b>	No
<b>Industrial Ethernet status LED</b>	0
<b>Protocols</b>	
<b>Protocols (terminal link)</b>	
<b>Sm@rtServer</b>	Yes
<b>Degree and class of protection</b>	

<b>Front</b>	IP65, NEMA 4x, NEMA 12 (when installed)
<b>Type of protection</b>	IP20
<b>IP (at the front)</b>	IP65
<b>NEMA</b>	NEMA 4x, NEMA 12
<b>Rear</b>	IP20
<b>Standards, approvals, certificates</b>	
<b>Certifications</b>	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
<b>FM Class I Div. 2</b>	Yes
<b>GL</b>	Yes
<b>ABS</b>	Yes
<b>BV</b>	Yes
<b>DNV</b>	Yes
<b>LRS</b>	Yes
<b>PRS</b>	No
<b>Gost-R</b>	No
<b>Suitable for safety functions</b>	No
<b>Use in hazardous areas</b>	
<b>EX zone 2</b>	Yes
<b>EX zone 22</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 flexible</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>With alarm logging system (incl. buffer and acknowledgment)</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>	50
<b>Telegram message procedure Alarm S</b>	No
<b>System messages HMI</b>	Yes
<b>System messages PLC</b>	Yes
<b>System messages, other (SIMATIC S7, Sinumerik, Simotion, ...)</b>	No
<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>Recipes</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

Number of bars per chart	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

Logging through printer	
<b>Recording/Printing</b>	Alarms, report (shift report), hardcopy
Transfer (upload/download)	
<b>Transfer of configuration</b>	MPI/PROFIBUS DP, serial, USB, by means of external storage medium, automatic transfer recognition
Process coupling	
<b>Connection to controller</b>	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"
<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>	No
<b>S7-300/400</b>	Yes
<b>MPI</b>	Yes
<b>PROFIBUS DP</b>	Yes
<b>PROFINET</b>	No
<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>	No
<b>Mitsubishi (FX)</b>	Yes
<b>Telemecanique (ADJUST)</b>	Yes
<b>Telemecanique (Uni-Telway)</b>	Yes ; Only in combination with WinCC flexible
<b>OMRON (LINK/Multilink)</b>	No
<b>Modicon (Modbus)</b>	Yes
Functions	
<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

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
Multi Media Card	Yes
Additional software components loadable	Yes
Dimensions	
Front of enclosure (W x H)	212 mm x 156 mm
Weight	
Weight	0.8 kg
other	
free hotline	Yes
Warranty period	1 a
Status	Mar 4, 2013