



SIMATIC TOUCH PANEL TP 177MICRO FOR SIMATIC S7-200 5.7" BLUE MODE STN DISPLAY CONFIGURABLE WINCC FLEXIBLE 2004 MICRO 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
Size	5.7"
Display type	STN, 4 blue levels
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)	about 50,000 hours
Control elements	
Control elements	Touch screen
Operating options	Touch
Function keys, programmable	none
Keyboard fonts	
Keys with LED	No ; 0
user-definable label membrane keys	No

<b>Number of function keys with LEDs</b>	0
<b>System keys</b>	No
<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>Design as touch screen</b>	Yes
<b>Supply voltage</b>	
<b>Type of supply voltage</b>	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>Power</b>	
<b>Power</b>	6 W
<b>Processor</b>	
<b>Processor</b>	ARM
<b>Processor type</b>	ARM
<b>Memory</b>	
<b>Type</b>	Flash
<b>usable memory for user data</b>	256 KB usable memory for user data
<b>Time of day</b>	
<b>Clock</b>	
<b>Type</b>	Software clock, no battery backup
<b>Hardware clock (real-time clock)</b>	No
<b>Software clock</b>	Yes
<b>battery-backed</b>	No
<b>synchronizable</b>	No
<b>Interfaces</b>	
<b>Interfaces</b>	1 x RS485 (max. 187.5 Mbit/s)
<b>Number of RS 485 interfaces</b>	1
<b>Transmission rate, max.</b>	187.5 kbit/s
<b>Degree and class of protection</b>	
<b>Front</b>	IP65, NEMA 4x (when installed)
<b>IP (at the front)</b>	IP65
<b>NEMA</b>	NEMA 4x
<b>Rear</b>	IP20
<b>IP (rear)</b>	IP20

Standards, approvals, certificates	
<b>Certifications</b>	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
<b>cULus</b>	Yes
<b>EAC (former Gost-R)</b>	No
<b>Suitable for safety functions</b>	No
Marine approval	
<b>Germanischer Lloyd (GL)</b>	Yes
<b>American Bureau of Shipping (ABS)</b>	Yes
<b>Bureau Veritas (BV)</b>	Yes
<b>Det Norske Veritas (DNV)</b>	Yes
<b>Lloyds Register of Shipping (LRS)</b>	Yes
<b>Nippon Kaiji Kyokai (Class NK)</b>	Yes
<b>Polski Rejestr Statkow (PRS)</b>	No
Use in hazardous areas	
<b>EX zone 2</b>	Yes
<b>EX zone 22</b>	Yes
<b>FM Class I Division 2</b>	Yes
Ambient conditions	
<b>Mounting position</b>	vertical
<b>maximum permissible angle of inclination without external ventilation</b>	+/- 35 °
Storage/transport temperature	
<b>Transport, storage</b>	-20 °C to +60 °C
Relative humidity	
<b>Operation, max.</b>	90 %
Operating systems	
<b>Operating system</b>	LINUX
Configuration	
<b>Message indicator</b>	Yes
<b>With alarm logging system (incl. buffer and acknowledgment)</b>	Yes
Configuration software	
<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>	No
<b>WinCC Advanced (TIA Portal)</b>	No
<b>WinCC Professional (TIA Portal)</b>	No
<b>Configuration tool</b>	WinCC flexible Micro Version 2004 SP1, HSP or higher (to be ordered separately)
<b>2. Configuration kit</b>	WinCC flexible Micro
<b>Version</b>	Version 2004 SP 1; HSP
<b>Configuration tool</b>	WinCC flexible
<b>Type</b>	AAA
<b>Languages</b>	
<b>Online languages</b>	
<b>Number of online/runtime languages</b>	5
<b>Project 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>	320
<b>Number of tooltips</b>	0
<b>Message system</b>	
<b>Number of alarm classes</b>	32
<b>Number of messages</b>	500
<b>Bit messages</b>	Yes
<b>Analog messages</b>	Yes
<b>Number of bit messages</b>	500
<b>Number of analog messages</b>	20
<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, etc.)</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>	Yes
<b>Message indicator</b>	Yes
<b>acoustic feedback</b>	No
<b>First/last value</b>	Yes

Variables	
Number of variables per device	250
Number of variables per screen	20
Limit values	Yes
Multiplexing	Yes
Structures	No
Images	
Number of configurable images	250
Permanent window/default	Yes
Start screen configurable	Yes
Image selection by PLC	No
Image number in the PLC	No
Image objects	
Text objects	500 text elements
I/O fields per image	20
Date/time fields	0
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 curves per diagram	1
Number of bars per chart	5
Limit value lines	Yes
alphanumeric fields	0
alphanumeric fields per image	0
numerical fields	0
numerical fields per image	0
Password fields	0
Number of slides per image	0
Number of analog indicators per image	0
Number of visible switches per project	0
visible switches per image	0
hidden switches per image	0
Number of status switches per project	0
Button status switches per image	0

Number of selector switches per project	0
Selector switches per image	0
Number of decade switches per project	0
Decade switches per image	0
Number of signal lamps per project	0
Signal lamps per image	0
<b>Attributes for dynamic objects</b>	
Color change	No
X/Y movement	No
Hide	Yes
Angle of rotation	No
<b>Lists</b>	
Number of text lists per project	150
Number of graphics lists per project	100
<b>Security</b>	
Number of user groups	1
Number of users	1
Password export/import	Yes
<b>Transfer (upload/download)</b>	
Transfer of configuration	serial
<b>Process coupling</b>	
Connection to controller	for S7-200, see section on "System interfaces"
<b>S7-200</b>	Yes
PPI (point-to-point)	Yes
PPI network	Yes
MPI	Yes
PROFIBUS DP	No
<b>S7-300/400</b>	No
MPI	No
PROFIBUS DP	No
PROFINET	No
<b>S5</b>	No
serial	No
PROFIBUS DP	No
<b>TI 505</b>	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
<b>Functions</b>	
Key repeat	No
TAB sequence	Yes
Calculating functions	Yes
Animate	No
Menu tree editor	No
Unit switchover	No
<b>Service tools/configuration aids</b>	
Clean screen	Yes
Touch calibration	Yes
Backup/Restore manually	Yes
Simulation	No
Device switchover	Yes
Delta transfer	No
Monitoring function for battery and memory	No
Trace (operation archive)	No
<b>Expandability/openness</b>	
Open Platform Program	No
<b>Peripherals/Options</b>	
Peripherals	
Multimedia Card	No
<b>Dimensions</b>	
Front of enclosure (W x H)	212 mm x 156 mm
Mounting cutout/device depth (W x H / D)	198 mm x 142 mm / 44 mm device depth
<b>Weights</b>	
Weight (without packaging)	0.75 kg
<b>Other</b>	
free hotline	Yes
Warranty period	1 a
Status	Jul 30, 2014