



*** Spare part *** SIMATIC Touch Panel TP 177micro for SIMATIC S7-200
5.7" blue mode STN display configurable from WinCC flexible 2004 Micro
HSP Contains open source software which is provided free of charge. See
enclosed CD

General information	
Product type designation	TP 177micro
Display	
Design of display	STN
Screen diagonal	5.7 in
Color display	No
Number of colors	4; Blue levels
Resolution (pixels)	
• Horizontal image resolution	320 pixel
• Vertical image resolution	240 pixel
Backlighting	
• MTBF backlighting (at 25 °C)	50 000 h
Control elements	
Control elements	Touch screen
Keyboard fonts	
• Membrane keyboard	
— user-definable label membrane keys	No
• Function keys	No
— Number of function keys	0
• System keys	No
— Number of system keys	0
• Numeric keyboard	Yes
• alphanumeric keyboard	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
Starting current inrush I _t	0.5 A ² ·s
Power	
Active power input, typ.	6 W
Processor	

Processor type	ARM
Memory	
Type of memory	Flash
Memory available for user data	256 kbyte
Time of day	
Clock	
<ul style="list-style-type: none"> Type 	Software clock, no battery backup
<ul style="list-style-type: none"> retentive 	No
<ul style="list-style-type: none"> synchronizable 	No
Interfaces	
Interfaces/bus type	1x RS 485 (max. 187.5 kbit/s)
Number of industrial Ethernet interfaces	0
Number of RS 485 interfaces	1
Number of RS 422 interfaces	0
Number of USB interfaces	0
Protocols	
Supports protocol for PROFINET IO	No
PROFIsafe	No
PROFIBUS	Yes
EtherNet/IP	No
Protocols (Ethernet)	
<ul style="list-style-type: none"> TCP/IP 	No
Further protocols	
<ul style="list-style-type: none"> MODBUS 	No
<ul style="list-style-type: none"> other bus systems 	Yes
Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP20
NEMA (front)	NEMA 4x (when installed)
Standards, approvals, certificates	
Certificate of suitability	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
Use in hazardous areas	
<ul style="list-style-type: none"> ATEX Zone 2 	Yes
<ul style="list-style-type: none"> ATEX Zone 22 	Yes
<ul style="list-style-type: none"> FM Class I Division 2 	Yes
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
Ambient conditions	
Ambient temperature during 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	
pre-installed operating system	LINUX

configuration / header	
Message indicator	Yes
Alarm system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes
Recipe management	No
Configuration software	
• Configuration tool	WinCC flexible Micro Version 2004 SP1, HSP or higher (to be ordered separately)
• 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)	No
• WinCC Advanced (TIA Portal)	No
• WinCC Professional (TIA Portal)	No
Languages	
Online languages	
• Number of online/runtime languages	5
Project languages	
• Languages per project	32
Functionality under WinCC (TIA Portal)	
Libraries	Yes
Task planner	Yes
Help system	Yes
• Number of characters per info text	320
• Number of tooltips	0
Message system	
• Number of alarm classes	32
• Number of messages	500
• Bit messages	Yes
— Number of bit messages	500
• Analog messages	Yes
— Number of analog messages	20
• Telegram message procedure Alarm S	No
• System messages HMI	Yes
• System messages PLC	Yes
• System event, more (SIMATIC S7, SINUMERIK, SIMOTION, ...)	No
• Lines	1
• Number of characters per message	80
• Number of process values per message	8
• Acknowledgment groups	Yes
• Message indicator	Yes
• acoustic feedback	No
• First/last value	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
• Number of I/O fields per image	20
• Number of 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
• Bar graphs	
— Number of bars per chart	5
• Sliders	
— Number of slides per image	0
• Pointer instruments	
— Number of analog indicators per image	0
• Limit value lines	Yes
• Number of alphanumeric fields	0
— alphanumeric fields per image	0
• Number of numerical fields	0
— numerical fields per image	0
• Number of password fields	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
— Number of 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
Attributes for dynamic objects	
• Color change	No
• X/Y movement	No
• Hide	Yes
• Angle of rotation	No
Lists	
• Number of text lists per project	150
• Number of graphics lists per project	100
Security	
• Number of user groups	1
• Number of users	1
• Password export/import	Yes
Transfer (upload/download)	
• Transfer of configuration	serial
Process coupling	
• Connection to controller	for S7-200, see section on "System interfaces"
• S7-200	Yes
— PPI (point-to-point)	Yes
— PPI network	Yes
— MPI	Yes
— PROFIBUS DP	No
• S7-300/400	No
— MPI	No
— PROFIBUS DP	No

— 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 manually	Yes
• Simulation	No
• Device switchover	Yes
• Delta transfer	No
• Monitoring function for battery and memory	No
• Trace (operation archive)	No
Expandability/openness	
• Open Platform Program	No
Peripherals/Options	
SIMATIC HMI MM memory card: Multi Media Card	No
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
Overall depth	45 mm
Weights	
Weight (without packaging)	0.75 kg
Other	
free hotline	Yes

last modified: 7/12/2021 