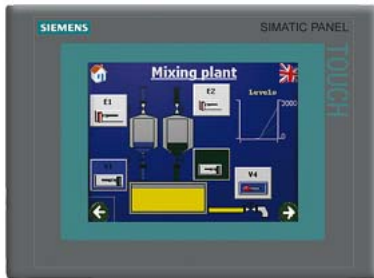


\*\*\* spare part \*\*\* SIMATIC TP 277 6" touch panel 5.7" TFT display 4 MB configuration memory, configurable with WinCC flexible 2005 Standard



General information	
Product type designation	TP277
Customer-specific configuration	Yes
Display	
Design of display	TFT
Screen diagonal	5.7 in
Color display	Yes
Number of colors	256
Resolution (pixels)	
• Horizontal image resolution	320 pixel
• Vertical image resolution	240 pixel
Backlighting	
• MTBF backlighting (at 25 °C)	60 000 h
Control elements	
Control elements	Touch screen
Keyboard fonts	
• Function keys	
— Number of function keys	0
— Number of function keys with LEDs	0
• System keys	No
— Number of system keys	0
• Numeric keyboard	Yes
• alphanumeric keyboard	Yes
• hexadecimal keyboard	Yes
Touch operation	
• Design as touch screen	Yes; analog, resistive
Connection type	
• Type of connection for mouse/keyboard/barcode reader	USB / USB / USB
Installation type/mounting	
Mounting position	vertical
Supply voltage	
Type of supply voltage	DC
Processor	
Processor type	RISC 32 bit
Memory	
Type of memory	Flash / RAM
Memory available for user data	4 Mbyte
Capacity of main memory, max.	64 Mbyte
Time of day	
Clock	

<ul style="list-style-type: none"> <li>• Type</li> <li>• retentive</li> <li>• synchronizable</li> </ul>	Software clock, synchronizable, no battery backup No Yes
<b>Interfaces</b>	
Interfaces/bus type	1x RS 422, 1x RS 485, 1x Ethernet (RJ45)
Number of industrial Ethernet interfaces	1
Number of RS 485 interfaces	1
Number of RS 422 interfaces	1
Number of USB interfaces	1; Up to 1 GB
Multimedia card/SD card slot	1x Multimedia Card slot, up to 128 MB
With software interfaces	No
<b>Protocols</b>	
Supports protocol for PROFINET IO	Yes
PROFIsafe	No
PROFIBUS	Yes
EtherNet/IP	No
<b>Protocols (Ethernet)</b>	
<ul style="list-style-type: none"> <li>• TCP/IP</li> </ul>	Yes
<b>Further protocols</b>	
<ul style="list-style-type: none"> <li>• MODBUS</li> <li>• other bus systems</li> </ul>	Yes Yes
<b>Degree and class of protection</b>	
IP (at the front)	IP65
IP (rear)	IP20
NEMA (front)	NEMA 4x (when installed)
<b>Standards, approvals, certificates</b>	
CE mark	Yes
UL approval	Yes
Suitable for safety functions	No
<b>Use in hazardous areas</b>	
<ul style="list-style-type: none"> <li>• ATEX Zone 2</li> <li>• ATEX Zone 22</li> </ul>	No; certificate no longer available as of 1 October 2020 No; certificate no longer available as of 1 October 2020
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
<ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> </ul>	0 °C 50 °C
<b>Ambient temperature during storage/transportation</b>	
<ul style="list-style-type: none"> <li>• min.</li> <li>• max.</li> </ul>	-20 °C 60 °C
<b>Relative humidity</b>	
<ul style="list-style-type: none"> <li>• Operation, max.</li> </ul>	80 %
<b>Operating systems</b>	
pre-installed operating system	Windows CE
<b>configuration / header</b>	
Message indicator	Yes
Alarm system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes
Recipe management	Yes
<b>Configuration software</b>	
<ul style="list-style-type: none"> <li>• Configuration tool</li> <li>• STEP 7 Basic (TIA Portal)</li> <li>• STEP 7 Professional (TIA Portal)</li> <li>• WinCC flexible Compact</li> <li>• WinCC flexible Standard</li> <li>• WinCC flexible Advanced</li> <li>• WinCC Basic (TIA Portal)</li> <li>• WinCC Comfort (TIA Portal)</li> <li>• WinCC Advanced (TIA Portal)</li> <li>• WinCC Professional (TIA Portal)</li> </ul>	WinCC flexible Standard Version 2005 SP1 or higher (to be ordered separately) No No No Yes Yes No Yes Yes Yes Yes

## Languages

Online languages	
• Number of online/runtime languages	16
Project languages	
• Languages per project	32
<b>Functionality under WinCC (TIA Portal)</b>	
Libraries	Yes
Task planner	Yes
Help system	Yes
• Number of characters per info text	80
Message system	
• Number of alarm classes	32
• Number of messages	4 000
• Bit messages	Yes
— Number of bit messages	4 000
• Analog messages	Yes
— Number of analog messages	4 000
• System messages HMI	Yes
• System messages PLC	Yes
• System event, more (SIMATIC S7, SINUMERIK, SIMOTION, ... )	Yes
• Lines	1
• Number of characters per message	80
• Number of process values per message	8
• Acknowledgment groups	
— Number of acknowledgement groups	Yes
• Message indicator	Yes
• First/last value	Yes
Recipe management	
• Number of recipes	300
• Data records per recipe	500
• Entries per data record	1 000
• Recipe memory	64 KB integrated Flash, expandable (using optional memory card)
Variables	
• Number of variables per device	2 048
• Number of variables per screen	200
• Number of variables	1 000
• Type Date & Time	2 048
• Limit values	Yes
• Multiplexing	Yes
• Structures	Yes
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	10 000 text elements
• Number of I/O fields per image	200
• Number of date/time fields	200
• Return	Yes
• Graphics object	Bit maps, icons, vector graphics
— Icons	1 000
Complex image objects	
• Status/control	With SIMATIC S7
• dynamic objects	Diagrams, bar graphs, sliders, analog display, invisible buttons
— Number of objects per project	1 000
— Number of curve diagrams per image	10
• Methods	Trend / profile
• Bar graphs	

— Number of bars per chart	10
● Sliders	
— Number of slides per image	10
● Pointer instruments	
— Number of analog indicators per image	10
● Limit value lines	Yes
● Number of alphanumerical fields	300
— alphanumeric fields per image	200
● Number of numerical fields	2 048
— numerical fields per image	200
● Number of password fields	2 048
● Number of visible switches per project	200
— visible switches per image	200
— hidden switches per image	200
● Number of status switches per project	200
— Number of status switches per image	200
● Number of selector switches per project	200
— Selector switches per image	200
● Number of decade switches per project	200
— Decade switches per image	200
● Number of signal lamps per project	200
— Signal lamps per image	200
<b>Attributes for dynamic objects</b>	
● Color change	Yes
● X/Y movement	Yes
● Hide	Yes
<b>Lists</b>	
● Number of text lists per project	500
● Number of text lists per image	200
● Number of entries per text list	256
● Number of graphics lists per project	400
● Number of graphic lists per image	200
● Number of entries per graphics list	256
<b>Archiving</b>	
● Number of archives per device	20
● Number of measuring points per project	20
● Number of entries per archive	10 000
● Message archive	Yes
● Process value archive	Yes
● Archiving methods	
— Sequential archive	Yes
— Short-term archive	Yes
● Memory location	MultiMediaCard
— Ethernet	Yes
● Data storage format	
— CSV	Yes
● Online evaluation	
— using trend curves	Yes
<b>Filters</b>	
● cyclic	Yes
● Tolerance	Yes
● Change	Yes
<b>Security</b>	
● Number of user groups	50
● Number of user rights	32
● Password export/import	Yes
<b>Logging through printer</b>	
● Recording/Printing	Alarms, report (shift report), color print, hardcopy
<b>Transfer (upload/download)</b>	
● Transfer of configuration	MPI/PROFIBUS DP, USB, Ethernet, automatic transfer recognition
<b>Process coupling</b>	

• Connection to controller	S5, S7-200, S7- 300/400, TI 505, SINUMERIK, SIMOTION, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), Telemecanique (ADJUST), OMRON (LINK/Multilink), Modicon (Modbus), see section on "System interfaces"
• S7-1200	Yes
• S7-200	Yes
— PPI (point-to-point)	Yes
— PPI network	Yes
— MPI	Yes
— PROFIBUS DP	Yes
— Ethernet	Yes
• S7-300/400	Yes
— MPI	Yes
— PROFIBUS DP	Yes
— PROFINET	Yes
• S5	Yes
— serial	Yes
— PROFIBUS DP	Yes
• TI 505	Yes
• Allen Bradley (DF1)	Yes
• Allen Bradley (DF485)	Yes
• Mitsubishi (FX)	Yes
• Mitsubishi (MP4)	Yes
• Telemecanique (ADJUST)	Yes
• Telemecanique (Uni-Telway)	Yes
• OMRON (LINK/Multilink)	Yes
• Modicon (Modbus)	Yes
• GE-Fanuc (SNP)	Yes
<b>Functions</b>	
• TAB sequence	Yes
• Calculating functions	Yes
• Animate	Yes
<b>Service tools/configuration aids</b>	
• Clean screen	Yes
• Touch calibration	Yes
• Backup/Restore manually	Yes
• Simulation	Yes
• Device switchover	Yes
• Delta transfer	Yes
<b>Expandability/openness</b>	
• Open Platform Program	Yes
<b>Peripherals/Options</b>	
Peripherals	Printer, barcode reader
SIMATIC HMI MM memory card: Multi Media Card	Yes
Additional software components loadable	Yes
<b>Dimensions</b>	
Width of the housing front	212 mm
Height of housing front	156 mm
Mounting cutout, width	197 mm
Mounting cutout, height	141 mm
Overall depth	45 mm
<b>Weights</b>	
Weight (without packaging)	0.78 kg
<b>Other</b>	
free hotline	Yes

last modified:

9/6/2023 