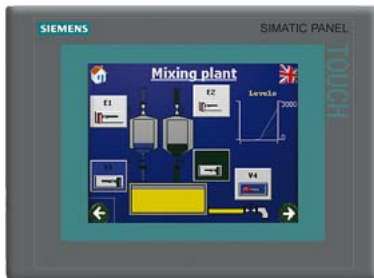


*** spare part *** SIMATIC TP 277 6" touch panel 5.7" TFT display 4 MB configuration memory, configurable with WinCC flexible 2005 Standard



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"> Type retentive synchronizable 	Software clock, synchronizable, no battery backup No Yes
Interfaces	
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
Protocols	
Supports protocol for PROFINET IO	Yes
PROFIsafe	No
PROFIBUS	Yes
EtherNet/IP	No
Protocols (Ethernet)	
<ul style="list-style-type: none"> TCP/IP 	Yes
Further protocols	
<ul style="list-style-type: none"> MODBUS other bus systems 	Yes Yes
Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP20
NEMA (front)	NEMA 4x (when installed)
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes
Suitable for safety functions	No
Use in hazardous areas	
<ul style="list-style-type: none"> ATEX Zone 2 ATEX Zone 22 	No; certificate no longer available as of 1 October 2020 No; certificate no longer available as of 1 October 2020
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> min. max. 	0 °C 50 °C
Ambient temperature during storage/transportation	
<ul style="list-style-type: none"> min. max. 	-20 °C 60 °C
Relative humidity	
<ul style="list-style-type: none"> Operation, max. 	80 %
Operating systems	
pre-installed operating system	Windows CE
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	Yes
Configuration software	
<ul style="list-style-type: none"> Configuration tool STEP 7 Basic (TIA Portal) STEP 7 Professional (TIA Portal) WinCC flexible Compact WinCC flexible Standard WinCC flexible Advanced WinCC Basic (TIA Portal) WinCC Comfort (TIA Portal) WinCC Advanced (TIA Portal) WinCC Professional (TIA Portal) 	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

Functionality under WinCC (TIA Portal)

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 Yes

- 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 alphanumeric 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
Attributes for dynamic objects	
• Color change	Yes
• X/Y movement	Yes
• Hide	Yes
Lists	
• 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
Archiving	
• 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
Filters	
• cyclic	Yes
• Tolerance	Yes
• Change	Yes
Security	
• Number of user groups	50
• Number of user rights	32
• Password export/import	Yes
Logging through printer	
• Recording/Printing	Alarms, report (shift report), color print, hardcopy
Transfer (upload/download)	
• Transfer of configuration	MPI/PROFIBUS DP, USB, Ethernet, automatic transfer recognition
Process coupling	
• 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
Functions	
• TAB sequence	Yes
• Calculating functions	Yes
• Animate	Yes
Service tools/configuration aids	
• Clean screen	Yes
• Touch calibration	Yes
• Backup/Restore manually	Yes
• Simulation	Yes
• Device switchover	Yes
• Delta transfer	Yes
Expandability/openness	
• Open Platform Program	Yes
Peripherals/Options	
Peripherals	Printer, barcode reader
SIMATIC HMI MM memory card: Multi Media Card	Yes
Additional software components loadable	Yes
Dimensions	
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
Weights	
Weight (without packaging)	0.78 kg
Other	
free hotline	Yes

last modified: 10/7/2021 