

The new part, as of 01.01.2015, is blocked for delivery. Spare part can continue to be purchased as required, but price may deviate from new part. Further information under SIMATIC current entry ID: 109486162. For questions, the familiar contact persons are available to you. SIMATIC MP 277 10" Touch Multi Panel with retentive memory 10.4" TFT display 6 MB configuration memory configurable with WinCC flexible 2005 Standard SP1



General information	
Product type designation	MP277 10" touch
Customer-specific configuration	Yes
Display	
Design of display	TFT
Screen diagonal	10.4 in
Color display	Yes
Number of colors	65 536
Resolution (pixels)	
• Horizontal image resolution	640 pixel
• Vertical image resolution	480 pixel
Backlighting	
• MTBF backlighting (at 25 °C)	50 000 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
maximum permissible angle of inclination without external ventilation	35°
Supply voltage	
Type of supply voltage	DC
Processor	
Processor type	ARM
Memory	
Type of memory	Flash / RAM
Memory available for user data	6 Mbyte

Capacity of main memory, max.	128 Mbyte
Time of day	
Clock	
<ul style="list-style-type: none"> • Type • retentive • synchronizable 	Hardware clock, battery backup, synchronizable Yes 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	2; 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 	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
cULus	Yes
Suitable for safety functions	No
Use in hazardous areas	
<ul style="list-style-type: none"> • ATEX Zone 2 • ATEX Zone 22 • FM Class I Division 2 	No; certificate no longer available as of 1 October 2020 No; certificate no longer available as of 1 October 2020 Yes
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. 	90 %
Operating systems	
pre-installed operating system	Windows CE
Configuration	
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 Version 2005 SP1 or higher (to be ordered separately) No No No

• WinCC flexible Standard	Yes
• WinCC flexible Advanced	Yes
• WinCC Basic (TIA Portal)	No
• WinCC Comfort (TIA Portal)	Yes
• WinCC Advanced (TIA Portal)	Yes
• WinCC Professional (TIA Portal)	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	200
• 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
• 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
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	
<ul style="list-style-type: none"> ● Status/control 	With SIMATIC S7
<ul style="list-style-type: none"> ● dynamic objects <ul style="list-style-type: none"> — Number of objects per project — Number of curve diagrams per image 	Diagrams, bar graphs, sliders, analog display, invisible buttons 1 000 10
<ul style="list-style-type: none"> ● Methods 	Trend / profile
<ul style="list-style-type: none"> ● Bar graphs <ul style="list-style-type: none"> — Number of bars per chart 	10
<ul style="list-style-type: none"> ● Sliders <ul style="list-style-type: none"> — Number of slides per image 	10
<ul style="list-style-type: none"> ● Pointer instruments <ul style="list-style-type: none"> — Number of analog indicators per image 	10
<ul style="list-style-type: none"> ● Limit value lines 	Yes
<ul style="list-style-type: none"> ● Number of alphanumeric fields <ul style="list-style-type: none"> — alphanumeric fields per image 	300 200
<ul style="list-style-type: none"> ● Number of numerical fields <ul style="list-style-type: none"> — numerical fields per image 	2 048 200
<ul style="list-style-type: none"> ● Number of password fields 	2 048
<ul style="list-style-type: none"> ● Number of visible switches per project <ul style="list-style-type: none"> — visible switches per image — hidden switches per image 	200 200 200
<ul style="list-style-type: none"> ● Number of status switches per project <ul style="list-style-type: none"> — Number of status switches per image 	200 200
<ul style="list-style-type: none"> ● Number of selector switches per project <ul style="list-style-type: none"> — Selector switches per image 	200 200
<ul style="list-style-type: none"> ● Number of decade switches per project <ul style="list-style-type: none"> — Decade switches per image 	200 200
<ul style="list-style-type: none"> ● Number of signal lamps per project <ul style="list-style-type: none"> — Signal lamps per image 	200 200
Attributes for dynamic objects	
<ul style="list-style-type: none"> ● Color change 	Yes
<ul style="list-style-type: none"> ● X/Y movement 	Yes
<ul style="list-style-type: none"> ● Hide 	Yes
Lists	
<ul style="list-style-type: none"> ● Number of text lists per project 	500
<ul style="list-style-type: none"> ● Number of text lists per image 	200
<ul style="list-style-type: none"> ● Number of entries per text list 	256
<ul style="list-style-type: none"> ● Number of graphics lists per project 	400
<ul style="list-style-type: none"> ● Number of graphic lists per image 	200
<ul style="list-style-type: none"> ● Number of entries per graphics list 	256
Archiving	
<ul style="list-style-type: none"> ● Number of archives per device 	20
<ul style="list-style-type: none"> ● Number of measuring points per project 	20
<ul style="list-style-type: none"> ● Number of entries per archive 	10 000
<ul style="list-style-type: none"> ● Message archive 	Yes
<ul style="list-style-type: none"> ● Process value archive 	Yes
<ul style="list-style-type: none"> ● Archiving methods <ul style="list-style-type: none"> — Sequential archive — Short-term archive 	Yes Yes
<ul style="list-style-type: none"> ● Memory location 	SD and MultiMediaCard
<ul style="list-style-type: none"> ● Data storage format <ul style="list-style-type: none"> — CSV 	Yes
<ul style="list-style-type: none"> ● Online evaluation <ul style="list-style-type: none"> — using trend curves 	Yes
Filters	
<ul style="list-style-type: none"> ● cyclic 	Yes
<ul style="list-style-type: none"> ● Tolerance 	Yes
<ul style="list-style-type: none"> ● 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), OMRON (LINK/Multilink), Modicon (Modbus) see chapter "System interfaces"
• S7-1200	Yes
• S7-1500	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
— PROFIBUS DP	Yes
• TI 505	Yes
• Allen Bradley (DF1)	Yes
• Allen Bradley (DF485)	Yes
• Mitsubishi (FX)	Yes
• Mitsubishi (MP4)	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
SIMATIC HMI SD memory card: Secure Digital memory card	Yes
USB memory	Yes
Additional software components loadable	Yes
Dimensions	
Width of the housing front	335 mm
Height of housing front	275 mm
Mounting cutout, width	310 mm
Mounting cutout, height	248 mm
Overall depth	61 mm

Weights

Weight (without packaging)	2.65 kg
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Other

free hotline	Yes
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Classifications

	Version	Classification
eClass	14	27-33-02-01
eClass	12	27-33-02-01
eClass	9.1	27-33-02-01
eClass	9	27-33-02-01
eClass	8	27-24-23-02
eClass	7.1	27-24-23-02
eClass	6	27-24-23-02
ETIM	10	EC001412
ETIM	9	EC001412
ETIM	8	EC001412
ETIM	7	EC001412
IDEA	4	6607
UNSPSC	15	43-21-15-06

Approvals / Certificates

General Product Approval	EMV
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[Manufacturer Declaration](#)



For use in hazardous locations

Radio Equipment Type Approval Certificate

Maritime application



[FM](#)

[Miscellaneous](#)



[NK / Nippon Kaiji Kyokai](#)

Maritime application



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