



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 8" Key Multi Panel with retentive memory 7.5" TFT display, 6 MB configuration memory, configurable with WinCC flexible 2008 Standard SP3 Update 5 WinCC Comfort V13 HSP

General information	
Customer-specific configuration	Yes
Display	
Design of display	TFT
Screen diagonal	7.5 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	Membrane keyboard
Keyboard fonts	
• Membrane keyboard	
— user-definable label membrane keys	Yes
• Function keys	
— Number of function keys	26
— Number of function keys with LEDs	18
• System keys	Yes
— Number of system keys	36
• Numeric keyboard	Yes
• alphanumeric keyboard	Yes
• Multi-key operation	Yes
— Number of multi-key operations	2
Touch operation	
• Design as touch screen	No
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
<b>Memory</b>	
Type of memory	Flash / RAM
Memory available for user data	6 Mbyte
Capacity of main memory, max.	128 Mbyte
<b>Time of day</b>	
Clock	
<ul style="list-style-type: none"> <li>Type</li> <li>retentive</li> <li>synchronizable</li> </ul>	Hardware clock, battery backup, synchronizable Yes 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	2
Multimedia card/SD card slot	1x MultiMediaCard slot
With software interfaces	No
<b>Protocols</b>	
Supports protocol for PROFINET IO	Yes
PROFIsafe	No
PROFIBUS	Yes
EtherNet/IP	No
Protocols (Ethernet)	
<ul style="list-style-type: none"> <li>TCP/IP</li> </ul>	Yes
Further protocols	
<ul style="list-style-type: none"> <li>MODBUS</li> <li>other bus systems</li> </ul>	Yes Yes
<b>Degree and class of protection</b>	
NEMA (front)	NEMA 4x (when installed)
<b>Standards, approvals, certificates</b>	
Certificate of suitability	CE, UL, cULus, NEMA 4x (Enclosure Type 4X, Type 12)
cULus	Yes
Suitable for safety functions	No
<b>Ambient conditions</b>	
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>min.</li> <li>max.</li> </ul>	0 °C 50 °C
Ambient temperature during storage/transportation	
<ul style="list-style-type: none"> <li>min.</li> <li>max.</li> </ul>	-20 °C 60 °C
Relative humidity	
<ul style="list-style-type: none"> <li>Operation, max.</li> </ul>	90 %
<b>Operating systems</b>	
pre-installed operating system	Windows CE
<b>Configuration</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
Configuration software	
<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> </ul>	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
<b>Languages</b>	
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	70
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 messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)	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
• Initial values	2 048
• 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

<ul style="list-style-type: none"> <li>• Graphics object <ul style="list-style-type: none"> <li>— Icons</li> </ul> </li> </ul>	Bit maps, icons, vector graphics 1 000
<b>Complex image objects</b>	
<ul style="list-style-type: none"> <li>• Status/control</li> <li>• dynamic objects <ul style="list-style-type: none"> <li>— Number of objects per project</li> <li>— Number of curve diagrams per image</li> </ul> </li> <li>• Methods</li> <li>• Bar graphs <ul style="list-style-type: none"> <li>— Number of bars per chart</li> </ul> </li> <li>• Sliders <ul style="list-style-type: none"> <li>— Number of slides per image</li> </ul> </li> <li>• Pointer instruments <ul style="list-style-type: none"> <li>— Number of analog indicators per image</li> </ul> </li> <li>• Limit value lines</li> <li>• Number of alphanumerical fields <ul style="list-style-type: none"> <li>— alphanumeric fields per image</li> </ul> </li> <li>• Number of numerical fields <ul style="list-style-type: none"> <li>— numerical fields per image</li> </ul> </li> <li>• Number of password fields</li> <li>• Number of visible switches per project <ul style="list-style-type: none"> <li>— visible switches per image</li> <li>— hidden switches per image</li> </ul> </li> <li>• Number of status switches per project <ul style="list-style-type: none"> <li>— Number of status switches per image</li> </ul> </li> <li>• Number of selector switches per project <ul style="list-style-type: none"> <li>— Selector switches per image</li> </ul> </li> <li>• Number of decade switches per project <ul style="list-style-type: none"> <li>— Decade switches per image</li> </ul> </li> <li>• Number of signal lamps per project <ul style="list-style-type: none"> <li>— Signal lamps per image</li> </ul> </li> </ul>	With SIMATIC S7 Diagrams, bar graphs, sliders, analog display, invisible buttons 1 000 10 Trend / profile 10 10 10 Yes 300 200 2 048 200 2 048 200 200 200 200 200 200 200 200 200 200 200
<b>Attributes for dynamic objects</b>	
<ul style="list-style-type: none"> <li>• Color change</li> <li>• X/Y movement</li> <li>• Hide</li> </ul>	Yes Yes Yes
<b>Lists</b>	
<ul style="list-style-type: none"> <li>• Number of text lists per project</li> <li>• Number of text lists per image</li> <li>• Number of entries per text list</li> <li>• Number of graphics lists per project</li> <li>• Number of graphic lists per image</li> <li>• Number of entries per graphics list</li> </ul>	500 200 256 400 200 256
<b>Archiving</b>	
<ul style="list-style-type: none"> <li>• Number of archives per device</li> <li>• Number of measuring points per project</li> <li>• Number of entries per archive</li> <li>• Message archive</li> <li>• Process value archive</li> <li>• Archiving methods <ul style="list-style-type: none"> <li>— Sequential archive</li> <li>— Short-term archive</li> </ul> </li> <li>• Memory location <ul style="list-style-type: none"> <li>— Ethernet</li> </ul> </li> <li>• Data storage format <ul style="list-style-type: none"> <li>— CSV</li> </ul> </li> <li>• Online evaluation <ul style="list-style-type: none"> <li>— using trend curves</li> </ul> </li> </ul>	20 20 10 000 Yes Yes Yes Yes SD and MultiMediaCard Yes Yes 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), 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
<b>Functions</b>	
• TAB sequence	Yes
• Calculating functions	Yes
• Animate	Yes
<b>Service tools/configuration aids</b>	
• 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
SIMATIC HMI SD memory card: Secure Digital memory card	Yes
USB memory	Yes
Additional software components loadable	Yes
<b>Dimensions</b>	
Width of the housing front	362 mm
Height of housing front	231 mm

Mounting cutout, width	338 mm
Mounting cutout, height	206 mm
Overall depth	61 mm
<b>Weights</b>	
Weight (without packaging)	2.25 kg
<b>Other</b>	
free hotline	Yes
<b>last modified:</b>	3/2/2021 