

AS OF 2015-01-01 THE PRODUCT IS BLOCKED FOR DELIVERY AND IS NO LONGER AVAILABLE AS A NEW PART. INFORMATION ABOUT SUCCESSOR SEE SIMATIC UPDATE ID: 62977695 FOR FURTHER QUESTIONS PLEASE APPROACH YOUR SIEMENS CONTACT PERSON. SIMATIC OP 277 6" OPERATOR PANEL 5.7" TFT DISPLAY 4 MB CONFIGURING MEMORY, CONFIGURABLE WITH WINCC FLEXIBLE 2005 STANDARD SP1 OR HIGHER



General information	
Customer-specific configuration	Yes
Display	
Design of display	TFT
Screen diagonal	5.7 in
Number of grayscales	0
Number of colors	256
Color type	Colors
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	Membrane keyboard
Keyboard fonts	
• Membrane keyboard	
— user-definable label membrane keys	Yes

<ul style="list-style-type: none"> <li>• Function keys <ul style="list-style-type: none"> <li>— Number of function keys</li> <li>— Number of function keys with LEDs</li> </ul> </li> <li>• System keys</li> <li>• Numeric/alphabetical input</li> <li>• Multi-key operation <ul style="list-style-type: none"> <li>— Number of multi-key operations</li> </ul> </li> </ul>	<p>24</p> <p>18</p> <p>Yes</p> <p>Yes / Yes (only English font can be displayed, only onscreen)</p> <p>Yes</p> <p>2</p>
<b>Touch operation</b>	
<ul style="list-style-type: none"> <li>• Design as touch screen</li> </ul>	No
<b>Connection type</b>	
<ul style="list-style-type: none"> <li>• Connection for mouse/keyboard/barcode reader</li> </ul>	USB / USB / USB
<b>Installation type/mounting</b>	
Mounting position	vertical
<b>Supply voltage</b>	
Type of supply voltage	DC
<b>Processor</b>	
Processor type	RISC 32-bit
<b>Memory</b>	
Type of memory	Flash / RAM
Memory available for user data	4 Mbyte
Main memory <ul style="list-style-type: none"> <li>• Capacity of main memory, max.</li> </ul>	64 Mbyte
<b>Time of day</b>	
<b>Clock</b>	
<ul style="list-style-type: none"> <li>• Type</li> <li>• retentive</li> <li>• synchronizable</li> </ul>	<p>Software clock, synchronizable, no battery backup</p> <p>No</p> <p>Yes</p>
<b>Interfaces</b>	
Interfaces/bus type	1 x RS422, 1 x RS485, 1 x Ethernet (RJ45)
Number of RS 485 interfaces	1
USB port	1 x USB
Multimedia card/SD card slot	1x Multimedia Card slot, up to 128 MB
<b>Industrial Ethernet</b>	
<ul style="list-style-type: none"> <li>• Industrial Ethernet interface</li> </ul>	1 x Ethernet (RJ45)
<b>Protocols</b>	
Supports protocol for PROFINET IO	Yes
PROFIsafe	No
PROFIBUS	Yes
<b>Protocols (Ethernet)</b>	

• TCP/IP	Yes
<b>Further protocols</b>	
• EtherNet/IP	No
• MODBUS	Yes
• other bus systems	Yes

<b>Degree and class of protection</b>	
Front	IP65
IP (at the front)	IP65
IP (rear)	IP20

<b>Standards, approvals, certificates</b>	
Certifications	CE, UL
Suitable for safety functions	No

<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
• min.	0 °C
• max.	50 °C
<b>Ambient temperature during storage/transportation</b>	
• min.	-20 °C
• max.	60 °C
<b>Relative humidity</b>	
• Operation, max.	80 %

<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
<b>Configuration software</b>	
• STEP 7 Basic (TIA Portal)	No
• STEP 7 Professional (TIA Portal)	No
• WinCC flexible Compact	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

- Configuration tool

WinCC flexible Standard Version 2005 SP1 or higher (to be ordered separately)

## 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 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
  - 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

### 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
<b>Images</b>	
• Number of configurable images	500
• Permanent window/default	Yes
• Start screen configurable	Yes
• Image selection by PLC	Yes
• Image number in the PLC	Yes
<b>Image objects</b>	
• 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
<b>Complex image objects</b>	
• 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>	

<ul style="list-style-type: none"> <li>• Transfer of configuration</li> </ul>	MPI/PROFIBUS DP, USB, Ethernet, automatic transfer recognition
<b>Process coupling</b>	
<ul style="list-style-type: none"> <li>• Connection to controller</li> </ul>	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"
<ul style="list-style-type: none"> <li>• S7-1200</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• S7-200 <ul style="list-style-type: none"> <li>— PPI (point-to-point)</li> <li>— PPI network</li> <li>— MPI</li> <li>— PROFIBUS DP</li> <li>— Ethernet</li> </ul> </li> </ul>	Yes
<ul style="list-style-type: none"> <li>• S7-300/400 <ul style="list-style-type: none"> <li>— MPI</li> <li>— PROFIBUS DP</li> <li>— PROFINET</li> </ul> </li> </ul>	Yes
<ul style="list-style-type: none"> <li>• S5 <ul style="list-style-type: none"> <li>— serial</li> <li>— PROFIBUS DP</li> </ul> </li> </ul>	Yes
<ul style="list-style-type: none"> <li>• TI 505</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Allen Bradley (DF1)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Allen Bradley (DF485)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Mitsubishi (FX)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Mitsubishi (MP4)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• OMRON (LINK/Multilink)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Modicon (Modbus)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• GE-Fanuc (SNP)</li> </ul>	Yes
<b>Functions</b>	
<ul style="list-style-type: none"> <li>• TAB sequence</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Calculating functions</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Animate</li> </ul>	Yes
<b>Service tools/configuration aids</b>	
<ul style="list-style-type: none"> <li>• Backup/Restore manually</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Simulation</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Device switchover</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Delta transfer</li> </ul>	Yes
<b>Expandability/openness</b>	
<ul style="list-style-type: none"> <li>• Open Platform Program</li> </ul>	Yes
<b>Peripherals/Options</b>	
Peripherals	Printer, barcode reader

- SIMATIC HMI MM memory card: Multi Media Card

Yes

Additional software components loadable

Yes

### Dimensions

Width of the housing front

308 mm

Height of housing front

204 mm

Mounting cutout, width

281 mm

Mounting cutout, height

177 mm

Overall depth

59 mm

### Weights

Weight (without packaging)

1.19 kg

### Other

free hotline

Yes

Warranty period

1 y

**last modified:**

04/28/2017