

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 MP 277 10" TOUCH MULTI PANEL W. RETENTIVE MEMORY 10,4" TFT DISPLAY 6 MB USER MEMORY CONFIG: WINCC FLEXIBLE 2005 STANDARD SP1



| General information             |              |
|---------------------------------|--------------|
| Customer-specific configuration | Yes          |
| Display                         |              |
| Design of display               | TFT          |
| Screen diagonal                 | 10.4 in      |
| Number of grayscales            | 0            |
| Number of colors                | 65 536       |
| Color type                      | Colors       |
| 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                  |              |
| • System keys                   | No           |
| • Numeric/alphabetical input    | Yes / Yes    |

|                                                                       |                                                |
|-----------------------------------------------------------------------|------------------------------------------------|
| — hexadecimal keyboard                                                | Yes                                            |
| <b>Touch operation</b>                                                |                                                |
| • Design as touch screen                                              | Yes; analog, resistive                         |
| <b>Connection type</b>                                                |                                                |
| • Connection for mouse/keyboard/barcode reader                        | USB / USB / USB                                |
| <b>Installation type/mounting</b>                                     |                                                |
| Mounting position                                                     | vertical                                       |
| maximum permissible angle of inclination without external ventilation | 35°                                            |
| <b>Supply voltage</b>                                                 |                                                |
| Type of supply voltage                                                | DC                                             |
| <b>Processor</b>                                                      |                                                |
| Processor type                                                        | ARM                                            |
| <b>Memory</b>                                                         |                                                |
| Type of memory                                                        | Flash / RAM                                    |
| Memory available for user data                                        | 6 Mbyte                                        |
| Main memory                                                           |                                                |
| • Capacity of main memory, max.                                       | 128 Mbyte                                      |
| <b>Time of day</b>                                                    |                                                |
| <b>Clock</b>                                                          |                                                |
| • Type                                                                | Hardware clock, battery backup, synchronizable |
| • retentive                                                           | Yes                                            |
| • synchronizable                                                      | Yes                                            |
| <b>Interfaces</b>                                                     |                                                |
| Interfaces/bus type                                                   | 1 x RS422, 1 x RS485, 1 x Ethernet (RJ45)      |
| Number of RS 485 interfaces                                           | 1                                              |
| USB port                                                              | 2 x USB                                        |
| Multimedia card/SD card slot                                          | 1x Multimedia Card slot, up to 128 MB          |
| <b>Industrial Ethernet</b>                                            |                                                |
| • Industrial Ethernet interface                                       | 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>                                              |                                                |
| • other bus systems                                                   | Yes                                            |
| <b>Degree and class of protection</b>                                 |                                                |

|                   |                                |
|-------------------|--------------------------------|
| Front             | IP65, NEMA 4x (when installed) |
| IP (at the front) | IP65                           |
| IP (rear)         | IP20                           |

### Standards, approvals, certificates

|                               |                                                                                    |
|-------------------------------|------------------------------------------------------------------------------------|
| Certifications                | CE, FM Class I Div. 2, UL, cULus, EX Zone 22, NEMA 4x (Enclosure Type 4X, Type 12) |
| cULus                         | Yes                                                                                |
| Suitable for safety functions | No                                                                                 |
| <b>Use in hazardous areas</b> |                                                                                    |
| • FM Class I Division 2       | Yes                                                                                |
| • EX zone 22                  | Yes                                                                                |

### Ambient conditions

|                                                          |        |
|----------------------------------------------------------|--------|
| <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.                                        | 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                                                                           |
| <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

|                                                                  |                                    |
|------------------------------------------------------------------|------------------------------------|
| <b>Online languages</b>                                          |                                    |
| • Number of online/runtime languages                             | 16                                 |
| <b>Project languages</b>                                         |                                    |
| • 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                                 |
| <b>Message system</b>                                            |                                    |
| • 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                                |
| <b>Recipe management</b>                                         |                                    |
| • Number of recipes                                              | 300                                |
| • Data records per recipe                                        | 500                                |
| • Entries per data record                                        | 1 000                              |
| • Recipe memory                                                  | 64 KB integrated Flash, expandable |
| <b>Variables</b>                                                 |                                    |
| • 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                                |
| <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                        | SD and MultiMediaCard                                                                                                                                                                      |
| • 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), 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>        |                         |
| • 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                     |

|                                                          |     |
|----------------------------------------------------------|-----|
| • 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 |
|----------------------------|---------|

### Other

|                       |            |
|-----------------------|------------|
| free hotline          | Yes        |
| Warranty period       | 1 y        |
| <b>last modified:</b> | 04/28/2017 |