

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" Key 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 |
| 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 | Membrane keyboard |
| Keyboard fonts | |
| • Membrane keyboard | |
| — user-definable label membrane keys | Yes |

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| • Function keys | |
| — Number of function keys | 36 |
| — Number of function keys with LEDs | 28 |
| • 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 |
| Memory | |
| Type of memory | Flash / RAM |
| Memory available for user data | 6 Mbyte |
| Capacity of main memory, max. | 64 Mbyte |
| Time of day | |
| Clock | |
| • Type | Hardware clock, battery backup, synchronizable |
| • retentive | Yes |
| • synchronizable | 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 respectively |
| Multimedia card/SD card slot | 1x Multimedia Card slot, up to 128 MB |
| Protocols | |
| Supports protocol for PROFINET IO | Yes |

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|--|---|
| PROFIsafe | No |
| PROFIBUS | Yes |
| Protocols (Ethernet) | |
| • TCP/IP | Yes |
| Further protocols | |
| • other bus systems | Yes |
| Degree and class of protection | |
| IP (at the front) | IP65 |
| IP (rear) | IP20 |
| NEMA (front) | NEMA 4x (when installed) |
| Standards, approvals, certificates | |
| cULus | Yes |
| Suitable for safety functions | No |
| Use in hazardous areas | |
| • ATEX Zone 22 | Yes |
| • FM Class I Division 2 | Yes |
| Ambient conditions | |
| Ambient temperature during operation | |
| • min. | 0 °C |
| • max. | 50 °C |
| Ambient temperature during storage/transportation | |
| • min. | -20 °C |
| • max. | 60 °C |
| Relative humidity | |
| • 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 | |
| • Configuration tool | WinCC flexible Standard Version 2005 SP1 or higher (to be ordered separately) |
| • STEP 7 Basic (TIA Portal) | No |
| • STEP 7 Professional (TIA Portal) | No |
| • WinCC flexible Compact | No |
| • WinCC flexible Standard | Yes |
| • WinCC flexible Advanced | Yes |

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|-----------------------------------|-----|
| • WinCC Basic (TIA Portal) | No |
| • WinCC Comfort (TIA Portal) | Yes |
| • WinCC Advanced (TIA Portal) | Yes |
| • WinCC Professional (TIA Portal) | Yes |

Languages

Online languages

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|--------------------------------------|----|
| • Number of online/runtime languages | 16 |
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Project languages

| | |
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| • Languages per project | 32 |
|-------------------------|----|

Functionality under WinCC (TIA Portal)

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| Libraries | Yes |
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| Task planner | Yes |
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| Help system | Yes |
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| • Number of characters per info text | 80 |
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Message system

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| • 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

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| • Number of recipes | 300 |
| • Data records per recipe | 500 |
| • Entries per data record | 1 000 |
| • Recipe memory | 64 KB integrated Flash, expandable |

Variables

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| • Number of variables per device | 2 048 |
| • Number of variables per screen | 200 |
| • Number of variables | 1 000 |
| • Initial values | 2 048 |

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| • 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 |

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| — 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 | SD and 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 |

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| 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 | |
| • Backup/Restore manually | Yes |
| • Simulation | Yes |
| • Device switchover | Yes |
| • Delta transfer | Yes |
| Expandability/openness | |
| • Open Platform Program | Yes |

Peripherals/Options

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|--|-------------------------|
| 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

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|----------------------------|--------|
| Width of the housing front | 483 mm |
| Height of housing front | 310 mm |
| Mounting cutout, width | 434 mm |
| Mounting cutout, height | 291 mm |
| Overall depth | 60 mm |

Weights

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| Weight (without packaging) | 4.95 kg |
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Other

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| free hotline | Yes |
| last modified: | 12/05/2019 |