

as of 01.01.2015 the product is blocked for delivery and is no longer available as new part. For information on the successor see SIMATIC news Entry ID: 62977695. For further questions, the familiar contact partners are available. 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 | |
|--------------------------------------|-------------------|
| 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 | Yes |
| — user-definable label membrane keys | |
| • Function keys | |

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| — Number of function keys | 36 |
| — Number of function keys with LEDs | 28 |
| • System keys | Yes |
| — Number of system keys | 36 |
| • 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 | 1 x RS422, 1 x RS485, 1 x Ethernet (RJ45) |
| Number of RS 485 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 |
| Industrial Ethernet | |
| • Industrial Ethernet interface | 1 x Ethernet (RJ45) |
| Protocols | |
| Supports protocol for PROFINET IO | Yes |
| PROFIsafe | No |
| PROFIBUS | Yes |

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| Protocols (Ethernet) | |
| • TCP/IP | Yes |
| Further protocols | |
| • other bus systems | Yes |
| Degree and class of protection | |
| IP (at the front) | IP65 |
| NEMA (front) | NEMA 4x (when installed) |
| 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 |
| 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 |
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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 |
| Warranty period | 1 y |
| last modified: | 02/27/2018 |