SIEMENS

## Data sheet 6AV6644-0BA01-2AX1



Figure similar

***spare part*** As of 01.01.2015, the new part is blocked for delivery. Spare part can continue to be purchased, but price may deviate from new part. Further information under SIMATIC current entry ID: 109486162. For questions, the familiar contact persons are available. SIMATIC MP 377 12" Key Multi Panel, Windows CE 5.0 12" color TFT display 12 MB configuration memory configurable as of WinCC flexible 2007 new Key aluminum front with uniform clamps

| | |
|---|---|
| **General information** | |
| Product type designation | MP377 12" key |
| **Display** | |
| Design of display | TFT |
| Screen diagonal | 12.1 in |
| Color display | Yes |
| Number of colors | 65 536 |
| Resolution (pixels) | |
| ● Horizontal image resolution | 800 pixel |
| ● Vertical image resolution | 600 pixel |
| Backlighting | |
| ● MTBF backlighting (at 25 °C) | 50 000 h |
| **Control elements** | |
| Control elements | Membrane keyboard |
| Keyboard | |
| ● Function keys | |
| — Number of function keys | 36 |
| — Number of function keys with LEDs | 36 |
| ● System keys | Yes |
| — Number of system keys | 38 |
| ● Numeric keyboard | Yes |
| ● alphanumeric keyboard | Yes |
| ● hexadecimal keyboard | Yes |
| ● Multi-key operation | Yes |
| — Number of multi-key operations | 2 |
| Touch operation | |
| ● Design as touch screen | No; without |
| Connection type | |
| ● Type of connection for mouse/keyboard/barcode reader | USB / USB / USB |
| **Installation type/mounting** | |
| maximum permissible angle of inclination without external ventilation | 35° |
| **Supply voltage** | |
| Type of supply voltage | DC |
| **Input current** | |
| Current consumption (rated value) | 1.5 A |
| Starting current inrush I²t | 4 A²·s |
| **Power** | |


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|---|---|
| Active power input, typ. | 36 W |
| **Storage** | |
| Type of memory | Flash / RAM |
| Memory available for user data | 12 288 kbyte |
| **Time of day** | |
| Clock | |
| ● Type | Hardware clock, battery backup, synchronizable |
| ● retentive | Yes |
| ● synchronizable | Yes |
| **Interfaces** | |
| Interfaces/bus type | 1x RS 422, 1x RS 485, 2x Ethernet (RJ45) |
| Number of industrial Ethernet interfaces | 2 |
| Number of RS 485 interfaces | 1 |
| Number of RS 422 interfaces | 1 |
| Number of USB interfaces | 2; Up to 1 GB respectively |
| CF card slot | 1x CF card slot |
| Multimedia card/SD card slot | 1x Multimedia Card slot, up to 128 MB |
| With software interfaces | No |
| **Protocols** | |
| Supports protocol for PROFINET IO | Yes |
| PROFIsafe | No |
| PROFIBUS | Yes |
| EtherNet/IP | Yes |
| MPI | Yes |
| Protocols (Ethernet) | |
| ● TCP/IP | Yes |
| Protocols (terminal link) | |
| ● Sm@rtServer | Yes |
| Further protocols | |
| ● MODBUS | Yes |
| **EMC** | |
| Emission of radio interference acc. to EN 55 011 | |
| ● Limit class A, for use in industrial areas | Yes |
| **Degree and class of protection** | |
| IP (at the front) | IP65 |
| IP (rear) | IP20 |
| NEMA (front) | NEMA 4, NEMA 12 (when installed) |
| **Standards, approvals, certificates** | |
| CE mark | Yes |
| UL approval | Yes |
| cULus | Yes |
| Use in hazardous areas | |
| ● ATEX Zone 2 | No; certificate no longer available as of 1 October 2020 |
| ● ATEX Zone 22 | No; certificate no longer available as of 1 October 2020 |
| **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 |


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|---|---|
| Process value display (output) | Yes |
| Process value default (input) possible | Yes |
| Recipe management | Yes |
| Configuration software | |
| ● Configuration tool | WinCC flexible Standard Version 2007 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 |
| ● WinCC Basic (TIA Portal) | No |
| ● WinCC Comfort (TIA Portal) | Yes |
| ● WinCC Advanced (TIA Portal) | Yes |
| ● WinCC Professional (TIA Portal) | Yes |
| **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 | 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 |
| ● Telegram message procedure Alarm S | Yes |
| ● System messages HMI | Yes |
| ● System messages PLC | Yes |
| ● System event, more (SIMATIC S7, SINUMERIK, SIMOTION, ... ) | Yes |
| ● Lines | 1 |
| ● Number of characters per message | 80 |
| ● Number of process values per message | 8 |
| ● Message indicator | Yes |
| ● First/last value | Yes |
| Recipe management | |
| ● Number of recipes | 500 |
| ● Data records per recipe | 1 000 |
| ● Entries per data record | 1 000 |
| ● Recipe memory | 128 KB integrated Flash, expandable |
| Variables | |
| ● Number of variables per device | 4 096; Configuration with WinCC flexible 2008 and higher |
| ● Number of variables per screen | 400 |
| ● Number of variables | 2 000 |
| ● 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 |


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|---|---|
| ● Image selection by PLC | Yes |
| ● Image number in the PLC | Yes |
| Image objects | |
| ● Text objects | 30 000 text elements |
| ● Number of I/O fields per image | 400 |
| ● Number of date/time fields | 400 |
| ● Return | Yes |
| ● Graphics object | Bit maps, icons, vector graphics |
| — Icons | 2 000 |
| Complex image objects | |
| ● Status/control | With SIMATIC S7 |
| ● dynamic objects | Diagrams, bar graphs, sliders, analog display, invisible buttons |
| — Number of objects per project | 2 000 |
| — Number of curve diagrams per image | 20 |
| ● Methods | Trend / profile |
| ● Bar graphs | |
| — Number of bars per chart | 20 |
| ● Sliders | |
| — Number of slides per image | 20 |
| ● Pointer instruments | |
| — Number of analog indicators per image | 20 |
| ● Limit value lines | Yes |
| ● Number of alphanumerical fields | 300 |
| — alphanumeric fields per image | 400 |
| ● Number of numerical fields | 2 048 |
| — numerical fields per image | 400 |
| ● Number of password fields | 2 048 |
| ● Number of visible switches per project | 400 |
| — visible switches per image | 400 |
| — hidden switches per image | 400 |
| ● Number of status switches per project | 400 |
| — Number of status switches per image | 400 |
| ● Number of selector switches per project | 400 |
| — Selector switches per image | 400 |
| ● Number of signal lamps per project | 400 |
| — Signal lamps per image | 400 |
| 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 | 400 |
| ● Number of entries per text list | 256 |
| ● Number of graphics lists per project | 500 |
| ● Number of graphic lists per image | 400 |
| ● Number of entries per graphics list | 256 |
| Archiving | |
| ● Number of archives per device | 50 |
| ● Number of measuring points per project | 50 |
| ● Number of entries per archive | 50 000 |
| ● Message archive | Yes |
| ● Process value archive | Yes |
| ● Archiving methods | Sequential log, circular log, alarm log, process value archive |
| — Sequential archive | Yes |
| — Short-term archive | Yes |
| ● Memory location | CF card, SD/MMC card, Ethernet, USB memory stick |
| — CF card | Yes |
| — Ethernet | Yes |


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|---|---|
| ● Data storage format | CSV file, readable, e.g. with MS Excel, MS Access |
| — CSV | Yes |
| ● external evaluation | readable, e.g. with MS Excel, MS Access, etc. |
| ● Size of archive | depending on free memory on ext. card/stick or on free hard disk space via network drive |
| ● Online evaluation | via trends |
| — 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 |
| **Data carrier support** | |
| ● CF card | Yes |
| ● Hard disk | Yes |
| **Logging through printer** | |
| ● Recording/Printing | Alarms, report (shift report), color print, hardcopy |
| **Transfer (upload/download)** | |
| ● Transfer of configuration | MPI/PROFIBUS DP, serial, USB, Ethernet, by means of external storage medium, automatic transfer recognition |
| **Process coupling** | |
| ● Connection to controller | S5, S7-200, S7-300/400, TI 505, Win AC, PC (TCP/IP), SINUMERIK, SIMOTION, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), OMRON (LINK/Multilink), Modicon (Modbus), further non-Siemens drivers, 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 |
| ● 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 (Host Link) | Yes |
| ● Modicon (Modbus RTU) | Yes |
| ● GE-Fanuc (SNP) | Yes |
| **Functions** | |
| ● Key repeat | Yes |
| ● TAB sequence | Yes |
| ● Calculating functions | Yes |
| ● Animate | Yes |
| **Service tools/configuration aids** | |
| ● Backup/Restore manually | Yes |
| ● Simulation | Yes |
| ● Device switchover | Yes |
| ● Delta transfer | Yes |


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|---|---|
| ● Monitoring function for battery and memory | Yes |
| **Expandability/openness** | |
| ● Open Platform Program | Yes |
| **Peripherals/Options** | |
| Peripherals | Printer, card reader, 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 | 483 mm |
| Height of housing front | 310 mm |
| Mounting cutout, width | 450 mm |
| Mounting cutout, height | 290 mm |
| mounting depth | 59 mm |
| **Weights** | |
| Weight (without packaging) | 5.5 kg |

**Classifications**

| | Version | Classification |
|---|---|---|
| eClass | 16 | 27-33-02-01 |
| eClass | 14 | 27-33-02-01 |
| eClass | 12 | 27-33-02-01 |
| eClass | 9.1 | 27-33-02-01 |
| eClass | 9 | 27-33-02-01 |
| eClass | 8 | 27-24-23-02 |
| eClass | 7.1 | 27-24-23-02 |
| eClass | 6 | 27-24-23-02 |
| ETIM | 10 | EC001412 |
| ETIM | 9 | EC001412 |
| ETIM | 8 | EC001412 |
| ETIM | 7 | EC001412 |
| IDEA | 4 | 6607 |
| UNSPSC | 15 | 43-21-15-06 |

**Approvals / Certificates**

**General Product Approval**

Manufacturer Declaration

**General Product Approval** | **EMV** | **For use in hazardous locations** | **Maritime application**

China RoHS

FM

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