

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 OPERATOR PANEL OP77B BACKLIT LC DISPLAY, 4.5" DISPL. W. GRAPHICS CAPABIL MPI-/PROFIBUS-DP INTERFACE UPTO 12 MB, PRINTER/USB INTERFACE, SLOT FOR MMC CARD, FOR CONFIGURATION OF WINCC FLEXIBLE 2004 COMPACT

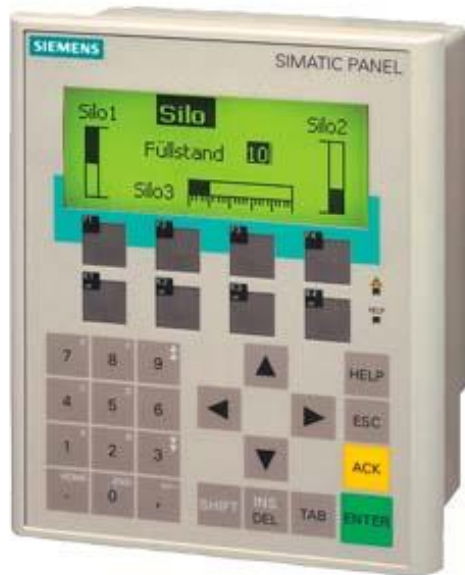


Figure similar

| General information | |
|---------------------------------|-------------------|
| Customer-specific configuration | No |
| Display | |
| Design of display | STN |
| Screen diagonal | 4.5 in |
| Number of grayscales | 0 |
| Number of colors | 2 |
| Color type | Black/white |
| Resolution (pixels) | |
| • Horizontal image resolution | 160 Pixel |
| • Vertical image resolution | 64 Pixel |
| Backlighting | |
| • MTBF backlighting (at 25 °C) | 100 000 h |
| Control elements | |
| Control elements | Membrane keyboard |
| Keyboard fonts | |

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|--|---|
| <ul style="list-style-type: none"> • Membrane keyboard <ul style="list-style-type: none"> — user-definable label membrane keys • Function keys <ul style="list-style-type: none"> — Number of function keys — Number of function keys with LEDs • System keys • Numeric/alphabetical input <ul style="list-style-type: none"> — hexadecimal keyboard • Multi-key operation | <p>Yes</p> <p>Yes</p> <p>8</p> <p>4</p> <p>Yes</p> <p>Yes / Yes</p> <p>Yes</p> <p>Yes</p> |
| Touch operation | |
| <ul style="list-style-type: none"> • Design as touch screen | No |
| Connection type | |
| <ul style="list-style-type: none"> • Connection for mouse/keyboard/barcode reader | - / - / - |
| Installation type/mounting | |
| Mounting position | vertical |
| maximum permissible angle of inclination without external ventilation | 80° |
| Supply voltage | |
| Type of supply voltage | DC |
| Input current | |
| Current consumption (rated value) | 0.2 A |
| Starting current inrush I ² t | 0.5 A ² ·s |
| Processor | |
| Processor type | ARM |
| Memory | |
| Type of memory | Flash / RAM |
| Memory available for user data | 1 000 kbyte |
| Type of output | |
| Info LED | Yes |
| Power LED | No |
| Error LED | No |
| Time of day | |
| Clock | |
| <ul style="list-style-type: none"> • Type • retentive • synchronizable | <p>Software clock, no battery backup</p> <p>No</p> <p>No</p> |
| Interfaces | |
| Interfaces/bus type | 1 x RS232, 1 x RS422, 1 x RS485 (max. 12 Mbit/s) |

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|---|---|
| Number of RS 485 interfaces | 1 |
| • Transmission rate, max. | 12 Mbit/s |
| USB port | 1 x USB |
| Multimedia card/SD card slot | combined |
| Industrial Ethernet | |
| • Industrial Ethernet interface | No |
| Protocols | |
| Supports protocol for PROFINET IO | No |
| PROFIsafe | No |
| PROFIBUS | Yes |
| Protocols (Ethernet) | |
| • TCP/IP | No |
| Further protocols | |
| • EtherNet/IP | No |
| • MODBUS | No |
| • other bus systems | Yes |
| Degree and class of protection | |
| Front | IP65, NEMA 4x, NEMA 12 (when installed) |
| IP (at the front) | IP65 |
| IP (rear) | IP20 |
| Standards, approvals, certificates | |
| Certifications | CE, GL, ABS, BV, DNV, LRS, FM Class I Div. 2, UL, CSA, cULus, EX-Zone 2 (in Vorbereitung), EX-Zone 22 (in Vorbereitung), C-TICK, NEMA 4x, NEMA 12 |
| cULus | Yes |
| EAC (formerly Gost-R) | No |
| Suitable for safety functions | No |
| Marine approval | |
| • Germanischer Lloyd (GL) | Yes |
| • American Bureau of Shipping (ABS) | Yes |
| • Bureau Veritas (BV) | Yes |
| • Det Norske Veritas (DNV) | Yes |
| • Lloyds Register of Shipping (LRS) | Yes |
| • Nippon Kaiji Kyokai (Class NK) | Yes |
| • Polski Rejestr Statkow (PRS) | No |
| Use in hazardous areas | |
| • FM Class I Division 2 | Yes |
| • EX zone 2 | Yes |
| • EX zone 22 | Yes |
| Ambient conditions | |
| Ambient temperature during operation | |

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| • min. | 0 °C |
| • max. | 50 °C |
| Ambient temperature during storage/transportation | |
| • min. | -20 °C |
| • max. | 60 °C |
| Relative humidity | |
| • Operation, max. | 90 % |

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| Operating systems | |
| pre-installed operating system | Windows CE |

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| 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 | |
| • STEP 7 Basic (TIA Portal) | No |
| • STEP 7 Professional (TIA Portal) | No |
| • WinCC flexible Compact | Yes |
| • 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 Compact Version 2004 or higher (to be ordered separately) |

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| Languages | |
| Online languages | |
| • Number of online/runtime languages | 5 |
| Project languages | |
| • Languages per project | 32 |

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| Functionality under WinCC (TIA Portal) | |
| Libraries | Yes |
| Task planner | Yes |
| Help system | Yes |
| • Number of characters per info text | 320 |
| Message system | |
| • Number of alarm classes | 32 |
| • Number of messages | 1 000 |
| • Bit messages | Yes |

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|--|-------------------------------------|
| — Number of bit messages | 1 000 |
| • Analog messages | Yes |
| — Number of analog messages | 1 000 |
| • Telegram message procedure Alarm S | Yes |
| • System messages HMI | Yes |
| • System messages PLC | Yes |
| • System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.) | No |
| • Number of characters per message | 80 |
| • Number of process values per message | 8 |
| • Acknowledgment groups | Yes |
| • Message indicator | No |
| • acoustic feedback | No |
| • First/last value | Yes |
| Recipe management | |
| • Number of recipes | 100 |
| • Data records per recipe | 200 |
| • Entries per data record | 200 |
| • Recipe memory | 32 KB integrated Flash, expandable |
| Variables | |
| • Number of variables per device | 1 000 |
| • Number of variables per screen | 30 |
| • Limit values | Yes |
| • Multiplexing | 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 | 2,500 text elements |
| • Number of I/O fields per image | 30 |
| • Number of date/time fields | 0 |
| • Index of screen context | No |
| • Return | Yes |
| • Graphics object | Bit maps, icons, icon (full-screen) |
| — Icons | 1 000 |
| — Icon (full screen) | 100 |
| Complex image objects | |
| • dynamic objects | Bar graphs |

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|---|---|
| • Bar graphs | |
| — Number of bars per chart | 5 |
| • Pointer instruments | |
| — Number of analog indicators per image | 0 |
| • Limit value lines | Yes |
| • Number of alphanumeric fields | 1 000 |
| — alphanumeric fields per image | 30 |
| • Number of numerical fields | 1 000 |
| — numerical fields per image | 30 |
| • Number of password fields | 0 |
| • Number of visible switches per project | |
| — visible switches per image | 0 |
| — hidden switches per image | 0 |
| • Number of status switches per project | |
| — Number of status switches per image | 0 |
| • Number of selector switches per project | |
| — Selector switches per image | 0 |
| • Number of decade switches per project | |
| — Decade switches per image | 0 |
| • Number of signal lamps per project | |
| — Signal lamps per image | 0 |
| Attributes for dynamic objects | |
| • Color change | Yes |
| • X/Y movement | No |
| • Hide | Yes |
| • Angle of rotation | No |
| Lists | |
| • Number of text lists per project | 300 |
| • Number of graphics lists per project | 0 |
| • Number of graphic lists per image | 0 |
| • Number of entries per graphics list | 0 |
| Security | |
| • Number of user groups | 50 |
| • Number of user rights | 32 |
| • Password export/import | Yes |
| Logging through printer | |
| • Recording/Printing | Alarms, report (shift report), hardcopy |
| Transfer (upload/download) | |
| • Transfer of configuration | MPI/PROFIBUS DP, serial, USB, by means of external storage medium, automatic transfer recognition |
| Process coupling | |

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|------------------------------|---|
| • Connection to controller | S5, S7-200, S7-300/400, TI 505, Win AC, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), OMRON (LINK/Multilink), Modicon (Modbus), further non-Siemens drivers, see chapter "System interfaces" |
| • S7-200 | Yes |
| — PPI (point-to-point) | Yes |
| — PPI network | Yes |
| — MPI | Yes |
| — PROFIBUS DP | Yes |
| — Ethernet | No |
| • S7-300/400 | Yes |
| — MPI | Yes |
| — PROFIBUS DP | Yes |
| — PROFINET | No |
| • S5 | Yes |
| — serial | Yes |
| — PROFIBUS DP | Yes |
| • TI 505 | Yes |
| • Allen Bradley (DF1) | Yes |
| • Allen Bradley (DF485) | Yes |
| • Mitsubishi (FX) | Yes |
| • Mitsubishi (MP4) | Yes |
| • Telemecanique (ADJUST) | No |
| • Telemecanique (Uni-Telway) | Yes; Only in combination with WinCC flexible |
| • OMRON (LINK/Multilink) | Yes |
| • Modicon (Modbus) | Yes |
| • GE-Fanuc (SNP) | Yes |

Functions

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|-------------------------|-----|
| • Key repeat | Yes |
| • TAB sequence | Yes |
| • Calculating functions | Yes |
| • Animate | Yes |
| • Menu tree editor | Yes |
| • Unit switchover | No |

Service tools/configuration aids

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|--|-----|
| • Clean screen | No |
| • Touch calibration | No |
| • Backup/Restore manually | Yes |
| • Simulation | Yes |
| • Device switchover | Yes |
| • Delta transfer | Yes |
| • Monitoring function for battery and memory | No |

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| • Trace (operation archive) | No |
| Expandability/openness | |
| • Open Platform Program | No |
| Peripherals/Options | |
| Peripherals | Printer |
| • SIMATIC HMI MM memory card: Multi Media Card | Yes |
| Additional software components loadable | Yes |
| Dimensions | |
| Width of the housing front | 150 mm |
| Height of housing front | 186 mm |
| Mounting cutout, width | 135 mm |
| Mounting cutout, height | 171 mm |
| Overall depth | 38.5 mm |
| Weights | |
| Weight (without packaging) | 0.5 kg |
| Other | |
| free hotline | Yes |
| Warranty period | 1 y |
| last modified: | 04/28/2017 |