

SIEMENS

Product data sheet

6AV6641-0CA01-0AX1


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

General information

Customer-specific configuration No

Display

Design of display STN
 Screen diagonal 4.5 in
 Size 4.5"
 Display type STN, Schwarz/Weiss
 Color type Black/white

Resolution (pixels)

Horizontal image resolution 160
 Vertical image resolution 64
 Resolution (WxH in pixel) 160 x 64

Backlighting

MTBF backlighting (at 25 °C) about 100,000 hours

Control elements

| | |
|--|--|
| Control elements | Membrane keyboard |
| Operating mode | |
| Operating options | Keys |
| Function keys, programmable | 8 function keys, 4 with LEDs |
| Connection for mouse/keyboard/barcode reader | - / - / - |
| Keyboard fonts | |
| Keys with LED | Yes |
| freely inscribable membrane keys | Yes |
| Number of function keys with LEDs | 4 |
| Numeric/alphabetical input | Yes / Yes |
| hexadecimal keyboard | Yes |
| Multi-key operation | Yes |
| Supply voltage | |
| Supply voltage | 24 V DC |
| Input current | |
| Rated current | 0.2 A |
| Inrush current A ² s | 0.5 A ² s |
| Processor | |
| Processor | ARM |
| Processor type | ARM |
| Memory | |
| Type | Flash / RAM |
| Usable memory for user data | 1000 KB usable memory for user data |
| Type of output | |
| Info LED | Yes |
| Power LED | No |
| Error LED | No |
| Time of day | |
| Clock | |
| Type | Software clock, no battery backup |
| Interfaces | |
| Interfaces | 1 x RS232, 1 x RS422, 1 x RS485 (max. 12 Mbit/s) |
| Number of RS 485 interfaces | 1 |

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|---|---|
| Transmission rate, max. | 12 Mbit/s |
| USB port | 1 x USB |
| Multimedia card/SD card slot | combined |
| Special interfaces | No |
| Industrial Ethernet | |
| Industrial Ethernet interface | No |
| Degree and class of protection | |
| Front | IP65, NEMA 4x, NEMA 12 (when installed) |
| Type of protection | IP20 |
| IP (at the front) | IP65 |
| NEMA | NEMA 4x, NEMA 12 |
| 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 |
| FM Class I Div. 2 | Yes |
| GL | Yes |
| ABS | Yes |
| BV | Yes |
| DNV | Yes |
| LRS | Yes |
| Class NK | Yes |
| PRS | No |
| Gost-R | No |
| Suitable for safety functions | No |
| Use in hazardous areas | |
| EX zone 2 | Yes |
| EX zone 22 | Yes |
| Ambient conditions | |
| Mounting position | vertical |
| maximum permissible angle of inclination without external ventilation | +/- 80 ° |
| Storage/transport temperature | |

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| Transport, storage | -20 °C to +60 °C |
| Relative humidity | |
| max. relative humidity | 90 % |
| Operating systems | |
| Operating system | Windows CE |
| Configuration | |
| 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) |
| 2nd configuration kit | WinCC flexible Compact |
| Version | Version 2004 |
| Configuration tool | WinCC flexible |
| Type | Compact |
| Languages | |
| Online languages | |
| Number of online/runtime languages | 5 |
| Languages | |
| Languages per project | 32 |
| Functionality under WinCC flexible | |
| Libraries | Yes |
| Task planner | Yes |
| Help system | Yes |
| Number of characters per info text | 320 |
| With alarm logging system (incl. buffer and acknowledgment) | |
| Number of alarm classes | 32 |

| | |
|---|------------------------------------|
| Number of messages | 1000 |
| Bit messages | Yes |
| Analog messages | Yes |
| Number of bit messages | 1000 |
| Number of analog messages | 1000 |
| Telegram message procedure Alarm S | Yes |
| System messages HMI | Yes |
| System messages PLC | Yes |
| System messages, other (SIMATIC S7, Sinumerik, Simotion,..) | No |
| Message length (in characters) | 80 |
| Number of process values per message | 8 |
| Acknowledgment groups | Yes |
| Message indicator | No |
| Acoustic feedback | No |
| First/last value | Yes |
| Recipes | |
| 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 | 1000 |
| 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 |

| | |
|---------------------------------------|-------------------------------------|
| Fields per image | 30 |
| Date/time fields | 0 |
| Index of screen context | No |
| Return | Yes |
| Graphics object | Bit maps, icons, icon (full-screen) |
| Icons | 1000 |
| Icon (full screen) | 100 |
| Complex image objects | |
| dynamic objects | Bar graphs |
| Number of bars per chart | 5 |
| Limit value lines | Yes |
| alphanumeric fields | 1000 |
| alphanumeric fields per image | 30 |
| numerical fields | 1000 |
| numerical fields per image | 30 |
| Password errors | 0 |
| Number of analog indicators per image | 0 |
| visible switches per image | 0 |
| hidden switches per image | 0 |
| Button status switches per image | 0 |
| Selector switches per image | 0 |
| Decade switches per image | 0 |
| Signal lamps per image | 0 |
| Attributes for dynamic objects | |
| Color change | Yes |
| X/Y movement | No |
| Hide | Yes |
| Angle of turn | 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 | |
| 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 | |
| Key repeat | Yes |
| TAB sequence | Yes |
| Calculating functions | Yes |
| Animate | Yes |
| Menu tree editor | Yes |
| Unit switchover | No |
| Service tools/configuration aids | |
| Clean screen | No |
| Touch calibration | No |
| Backup/restore | Yes |
| Simulation | Yes |
| Device switchover | Yes |
| Delta transfer | Yes |
| Monitoring function for battery and memory | No |
| Trace (operation archive) | No |
| Expandability/openness | |
| Open Platform Program | No |
| I/O / Options | |
| I/O devices | Printer |
| Multi Media Card | Yes |
| Dimensions | |
| Front of enclosure (W x H) | 150 mm x 186 mm |
| Weight | |
| Weight | 0.5 kg |
| other | |
| free hotline | Yes |
| Warranty period | 1 a |
| Status | Jul 17, 2012 |