# SIEMENS

**Data sheet**                                                      **6AV6645-0FE01-0AX1**



Figure similar

\*\*\*\* Spare part \*\*\* Does not correspond to the current version of the standard. SIMATIC Mobile Panel 277 IWLAN V2 (USA), with handwheel, key-operated switch and two illuminated pushbuttons, configurable with WinCC flexible Standard Version 2008 or higher or TIA Portal V11 SP2 or higher incl. 1 main battery Power supply to be ordered separately: 6AV6671-5CE00-0AX1 charging station 6AV6671-5CN00-0AX2 tabletop power supply unit (EU/US/UK/JP)

| General information | |
|---|---|
| Product type designation | Mobile Panel 277 IWLAN V2 |
| Customer-specific configuration | Yes |
| **Display** | |
| Design of display | TFT |
| Screen diagonal | 7.5 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 | Keys and touch |
| Keyboard fonts | |
| ● Membrane keyboard | |
| — user-definable label membrane keys | Yes |
| ● Function keys | |
| — Number of function keys | 18 |
| — Number of function keys with LEDs | 18 |
| ● Keys with LED | Yes |
| ● Numeric keyboard | Yes |
| ● alphanumeric keyboard | Yes |
| ● Multi-key operation | Yes |
| — Number of multi-key operations | 2 |
| Touch operation | |
| ● Design as touch screen | Yes; analog, resistive |
| Connection type | |
| ● Type of connection for mouse/keyboard/barcode reader | USB / USB / USB |
| Special operator controls | |
| ● Stop button | No |
| ● Acknowledgement button | No |
| ● Key-operated switch | Yes |
| ● Illuminated pushbutton | Yes |
| ● Handwheel | Yes |
| **Supply voltage** | |
| Design of the power supply | Via charging station or table power supply |
| Type of supply voltage | DC |

6/13/2023

| Processor | |
|---|---|
| Processor type | ARM, 520 MHz |
| **Memory** | |
| Type of memory | Flash / RAM |
| Memory available for user data | 6 Mbyte |
| Capacity of main memory, max. | 128 Mbyte |
| **Accumulator** | |
| Main rechargeable battery | |
| ● Rated voltage | 7.2 V |
| ● Capacity | 5 100 mA·h |
| ● Number of loading cycles, min | 500 |
| ● Charging time, typ. | 4 h |
| ● Operating time, typ. | 4 h |
| ● Display for battery capacity | Yes |
| ● Energy-saving mode | Yes |
| ● Battery replacement during operation | Yes |
| **Type of output** | |
| Power LED | Yes |
| LED for communication | Yes |
| LED for battery | Yes |
| Vibrations | Yes |
| **Time of day** | |
| Clock | |
| ● Hardware clock (real-time) | Yes |
| ● retentive | Yes |
| ● synchronizable | Yes |
| **Interfaces** | |
| Interfaces/bus type | 1x Ethernet (RJ45) |
| Number of industrial Ethernet interfaces | 1 |
| Number of RS 485 interfaces | 0 |
| Number of RS 422 interfaces | 0 |
| Number of USB interfaces | 1 |
| Number of wireless interfaces | 1 |
| Multimedia card/SD card slot | 1 MMC/SD card slot |
| WLAN | |
| ● Wireless LAN | Yes |
| ● Supports rapid roaming | Yes |
| **Protocols** | |
| Supports protocol for PROFINET IO | Yes |
| PROFIsafe | No |
| PROFIBUS | No |
| Protocols (Ethernet) | |
| ● TCP/IP | Yes |
| Further protocols | |
| ● MODBUS | Yes; Modicon (MODBUS TCP/IP) |
| ● other bus systems | Yes; Allen-Bradley E/IP C.Logix |
| **communication functions / header** | |
| Wireless communication | |
| ● supported standards | |
| — Radio standard WLAN 802.11 | Yes |
| **EMC** | |
| Emission of radio interference acc. to EN 55 011 | |
| ● Limit class A, for use in industrial areas | Yes; The product is designed for use in industrial environments. When used in residential areas, the emission of radio interference according to limit class B of EN 55011 must be ensured. For further information refer to the user documentation |
| **Standards, approvals, certificates** | |
| Certificate of suitability | cULus, RCM (former C-TICK) |
| CE mark | No |
| cULus | Yes |
| RCM (formerly C-TICK) | Yes |

| | |
|---|---|
| Suitable for safety functions | No |
| **Ambient conditions** | |
| Free fall | |
| ● Fall height, max. | 1.2 m |
| Ambient temperature during operation | |
| ● min. | 0 °C |
| ● max. | 40 °C |
| Ambient temperature during storage/transportation | |
| ● min. | -20 °C |
| ● max. | 60 °C |
| Relative humidity | |
| ● Operation, max. | 80 % |
| **Operating systems** | |
| pre-installed operating system | Windows CE |
| **configuration / header** | |
| 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 2008 SP2 and higher (to be ordered separately) |
| ● WinCC flexible Compact | No |
| ● WinCC flexible Standard | Yes |
| ● WinCC flexible Advanced | No |
| ● WinCC Basic (TIA Portal) | No |
| ● WinCC Comfort (TIA Portal) | Yes; V11 SP2 or higher |
| ● WinCC Advanced (TIA Portal) | Yes; V11 SP2 or higher |
| ● WinCC Professional (TIA Portal) | Yes; V11 SP2 or higher |
| **Languages** | |
| Online languages | |
| ● Number of online/runtime languages | 16 |
| Project languages | |
| ● Languages per project | 32 |
| **Functionality under WinCC (TIA Portal)** | |
| Libraries | Yes |
| Applications/options | Internet Explorer, Sm@rtService, Sm@rtAccess |
| ● Web browser | Yes |
| ● SIMATIC WinCC Sm@rtServer | Yes |
| Number of Visual Basic Scripts | Yes |
| Task planner | Yes |
| Help system | Yes |
| ● Number of characters per info text | 70 |
| Message system | |
| ● Number of alarm classes | 32 |
| ● Bit messages | Yes |
| — Number of bit messages | 4 000 |
| ● Analog messages | Yes |
| — Number of analog messages | 4 000 |
| ● System messages HMI | Yes |
| ● System messages PLC | Yes |
| ● Lines | 1 |
| ● Number of characters per message | 80 |
| ● Number of process values per message | 8 |
| ● Acknowledgment groups | |
| — Number of acknowledgement groups | 99 |
| ● Message indicator | Yes |
| ● First/last value | Yes |
| Recipe management | |
| ● Number of recipes | 300 |

| | |
|---|---|
| ● Data records per recipe | 500 |
| ● Entries per data record | 1 000 |
| ● Recipe memory | 64 KB integrated Flash, expandable |
| **Variables** | |
| ● Number of variables per device | 2 048 |
| ● Number of variables per screen | 200 |
| ● Number of variables | 1 000 |
| ● 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 |
| ● 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 | Yes; 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 alphanumerical 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 |
| — 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 |

6/13/2023

| | | |
|---|---|---|
| ● 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 | MultiMediaCard | |
| ● 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), PROFINET | |
| **Transfer (upload/download)** | | |
| ● Transfer of configuration | USB, Ethernet, automatic transfer recognition | |
| ● Wireless LAN | Yes | |
| **Process coupling** | | |
| ● Connection to controller | S7-200, S7- 300/400 see section on "System interfaces" | |
| ● S7-1200 | Yes | |
| ● S7-1500 | Yes | |
| ● S7-200 | Yes | |
| — Ethernet | Yes | |
| ● S7-300/400 | Yes | |
| — PROFINET | Yes | |
| ● LOGO! | Yes | |
| ● SIMOTION | Yes | |
| ● Allen Bradley (EtherNet/IP) | Yes | |
| ● Mitsubishi (MC TCP/IP) | Yes; WinCC V11 SP2 or higher | |
| ● Modicon (Modbus TCP/IP) | Yes | |
| ● Zones | Yes | |
| — Number of zones per project, max. | 254 | |
| — Number of transponders for zones per project, max. | 255 | |
| ● Transponder | Yes | |
| — Number of transponders per project, max. | 256 | |
| — adjustable distance range | Yes | |
| — adjustable distance, min. | 2 m | |
| — adjustable distance, max. | 8 m | |
| **Functions** | | |
| ● TAB sequence | Yes | |
| ● Calculating functions | Yes | |
| ● Animate | Yes | |
| **Service tools/configuration aids** | | |
| ● Clean screen | Yes | |
| ● Touch calibration | Yes | |
| ● Backup/Restore manually | Yes | |
| ● Simulation | Yes | |

| | |
|---|---|
| ● Device switchover | Yes |
| ● Delta transfer | Yes |
| **Peripherals/Options** | |
| Peripherals | 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 |
| **Mechanics/material** | |
| Enclosure material (front) | plastic |
| **Dimensions** | |
| Enclosure diameter | 290 mm |
| Depth of housing | 103 mm |
| **Weights** | |
| Weight (without packaging) | 2.2 kg |

| | |
|---|---|
| **last modified:** | 12/6/2022 |

6/13/2023