SIEMENS

Data sheet   **6AV6645-0EC01-0AX1**

Figure similar

**** Spare part *** Does not correspond to the current version of the standard. For use outside the EU SIMATIC Mobile Panel 277F IWLAN V2, with integrated acknowledgment button, emergency stop button, handwheel key-operated switch and two illuminated pushbuttons, supports IPCF (rapid roaming) configurable with WinCC flexible Standard Version 2008 SP 2 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	
● Emergency stop button (forced blocking)	Yes
● Acknowledgement button	Yes
● Key-operated switch	Yes
● Illuminated pushbutton	Yes
● Handwheel	Yes
Supply voltage	

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Design of the power supply	Via charging station or table power supply
Type of supply voltage	DC

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 safe	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	Yes
PROFIBUS	No

Protocols (Ethernet)

● TCP/IP	Yes

Further protocols

● MODBUS	No
● other bus systems	No

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	Yes
TÜV safety certification	Yes
Highest safety class achievable in safety mode	
● Performance level according to ISO 13849-1	e
● SIL acc. to IEC 61508	SIL 3
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
● 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; As of V13 SP1 Update 4, PROFIsafe communication also possible
● S7-200	Yes
— Ethernet	Yes
● S7-300/400	Yes
— PROFINET	Yes
● SIMOTION	Yes; WinCC flexible 2008 SP3 or higher
● Zones	Yes
— Number of zones per project, max.	254
— Number of transponders for zones per project, max.	255
● Effective range	Yes
— Number of effective ranges per project, max.	127
— Number of transponders for effective ranges per project, max.	127
● 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

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