SIEMENS

Data sheet 6AV6645-0EF01-0AX1

Figure similar

**** Spare part *** Does not correspond to the current version of the standard. For use outside the EU SIMATIC Mobile Panel 277F IWLAN (RFID), 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 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	277F IWLAN V2 (RFID)
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	
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 RS 485 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
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
Degree and class of protection	
Degree of protection acc. to EN 60529	IP65
Standards, approvals, certificates	
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

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
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
• Number of messages	4 000
• 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
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
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

Other	
free hotline	Yes

last modified: 03/14/2020