6AV6645-0GC01-0AX1

Data sheet



**** Spare part *** Does not correspond to the current version of the standard. SIMATIC Mobile Panel 277F IWLAN V2 (USA), 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 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 277F 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	
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	1 11110.02 04.4 40.4
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
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Suitable for safety functions	Yes
TÜV safety certification	Yes
Highest safety class achievable in safety mode	
 Performance level according to ISO 13849-1 	е
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	riena / pronie
Number of bars per chart	10
·	10
Sliders Number of alides par image.	40
Number of slides per image Delinter in attraction and the state of the state	10
Pointer instruments	40
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

a Hido	Voc
• Hide	Yes
Lists	500
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
	Yes
• Transponger	
Transponder Number of transponders per project, may	256
 Number of transponders per project, max. 	256 Ves
Number of transponders per project, max.adjustable distance range	Yes
Number of transponders per project, max.adjustable distance rangeadjustable distance, min.	Yes 2 m
 Number of transponders per project, max. adjustable distance range adjustable distance, min. adjustable distance, max. 	Yes
Number of transponders per project, max. adjustable distance range adjustable distance, min. adjustable distance, max. Functions	Yes 2 m 8 m
- Number of transponders per project, max. - adjustable distance range - adjustable distance, min. - adjustable distance, max. Functions • TAB sequence	Yes 2 m 8 m Yes
— Number of transponders per project, max. — adjustable distance range — adjustable distance, min. — adjustable distance, max. Functions • TAB sequence • Calculating functions	Yes 2 m 8 m Yes Yes
— Number of transponders per project, max. — adjustable distance range — adjustable distance, min. — adjustable distance, max. Functions • TAB sequence	Yes 2 m 8 m Yes

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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