Data sheet



Figure similar

***** Spare part *** Does not correspond to the current version of the standard. SIMATIC Mobile Panel 277F IWLAN V2 (USA), with integrated acknowledgment button and emergency stop button, 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	277F IWLAN V2 (USA)
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	No
 Illuminated pushbutton 	No
Handwheel	No
Supply voltage	
Design of the power supply	Via charging station or table power supply
	Via charging station or table power supply DC
Design of the power supply	
Design of the power supply Type of supply voltage	
Design of the power supply Type of supply voltage Processor	DC
Design of the power supply Type of supply voltage Processor Processor type	DC
Design of the power supply Type of supply voltage Processor Processor type Memory Type of memory Memory available for user data	DC ARM, 520 MHz Flash / RAM 6 Mbyte
Design of the power supply Type of supply voltage Processor Processor type Memory Type of memory	ARM, 520 MHz Flash / RAM
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Design of the power supply Type of supply voltage Processor Processor type Memory Type of memory Memory available for user data Capacity of main memory, max.	ARM, 520 MHz Flash / RAM 6 Mbyte 128 Mbyte
Design of the power supply Type of supply voltage Processor Processor type Memory Type of memory Memory available for user data Capacity of main memory, max. Accumulator	DC ARM, 520 MHz Flash / RAM 6 Mbyte
Design of the power supply Type of supply voltage Processor Processor type Memory Type of memory Memory available for user data Capacity of main memory, max. Accumulator Main rechargeable battery	ARM, 520 MHz Flash / RAM 6 Mbyte 128 Mbyte
Design of the power supply Type of supply voltage Processor Processor type Memory Type of memory Memory available for user data Capacity of main memory, max. Accumulator Main rechargeable battery • Rated voltage	ARM, 520 MHz Flash / RAM 6 Mbyte 128 Mbyte
Design of the power supply Type of supply voltage Processor Processor type Memory Type of memory Memory available for user data Capacity of main memory, max. Accumulator Main rechargeable battery • Rated voltage • Capacity	ARM, 520 MHz Flash / RAM 6 Mbyte 128 Mbyte 7.2 V 5 100 mA·h
Design of the power supply Type of supply voltage Processor Processor type Memory Type of memory Memory available for user data Capacity of main memory, max. Accumulator Main rechargeable battery Rated voltage Capacity Number of loading cycles, min	ARM, 520 MHz Flash / RAM 6 Mbyte 128 Mbyte 7.2 V 5 100 mA·h 500
Design of the power supply Type of supply voltage Processor Processor type Memory Type of memory Memory available for user data Capacity of main memory, max. Accumulator Main rechargeable battery Rated voltage Capacity Number of loading cycles, min Charging time, typ.	ARM, 520 MHz Flash / RAM 6 Mbyte 128 Mbyte 7.2 V 5 100 mA·h 500 4 h
Design of the power supply Type of supply voltage Processor Processor type Memory Type of memory Memory available for user data Capacity of main memory, max. Accumulator Main rechargeable battery Rated voltage Capacity Number of loading cycles, min Charging time, typ. Operating time, typ.	ARM, 520 MHz Flash / RAM 6 Mbyte 128 Mbyte 7.2 V 5 100 mA·h 500 4 h 4 h
Design of the power supply Type of supply voltage Processor Processor type Memory Type of memory Memory available for user data Capacity of main memory, max. Accumulator Main rechargeable battery Rated voltage Capacity Number of loading cycles, min Charging time, typ. Operating time, typ. Display for battery capacity	ARM, 520 MHz Flash / RAM 6 Mbyte 128 Mbyte 7.2 V 5 100 mA·h 500 4 h 4 h Yes

Type of output	
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
- Supports rapid roaming	100
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	
Certifications	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	165
Performance level according to ISO 13849-1	е
	SIL 3
• 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	Vas
Message indicator	Yes
Message indicator Alarm system (incl. buffer and acknowledgment)	Yes
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output)	Yes Yes
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible	Yes Yes Yes
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management	Yes Yes
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software	Yes Yes Yes Yes Yes
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management	Yes Yes Yes
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software	Yes Yes Yes Yes Yes WinCC flexible Standard Version 2008 SP2 and higher (to be
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software • Configuration tool	Yes Yes Yes Yes WinCC flexible Standard Version 2008 SP2 and higher (to be ordered separately)
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software • Configuration tool • WinCC flexible Compact • WinCC flexible Standard	Yes Yes Yes Yes WinCC flexible Standard Version 2008 SP2 and higher (to be ordered separately) No
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software • Configuration tool • WinCC flexible Compact • WinCC flexible Standard • WinCC flexible Advanced	Yes Yes Yes Yes WinCC flexible Standard Version 2008 SP2 and higher (to be ordered separately) No Yes
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software • Configuration tool • WinCC flexible Compact • WinCC flexible Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal)	Yes Yes Yes Yes WinCC flexible Standard Version 2008 SP2 and higher (to be ordered separately) No Yes No No
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software • Configuration tool • WinCC flexible Compact • WinCC flexible Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal)	Yes Yes Yes Yes WinCC flexible Standard Version 2008 SP2 and higher (to be ordered separately) No Yes No No No Yes; V11 SP2 or higher
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software • Configuration tool • WinCC flexible Compact • WinCC flexible Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Advanced (TIA Portal)	Yes Yes Yes Yes WinCC flexible Standard Version 2008 SP2 and higher (to be ordered separately) No Yes No No No Yes; V11 SP2 or higher Yes; V11 SP2 or higher
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software • Configuration tool • WinCC flexible Compact • WinCC flexible Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal)	Yes Yes Yes Yes WinCC flexible Standard Version 2008 SP2 and higher (to be ordered separately) No Yes No No No Yes; V11 SP2 or higher
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software • Configuration tool • WinCC flexible Compact • WinCC flexible Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Professional (TIA Portal)	Yes Yes Yes Yes WinCC flexible Standard Version 2008 SP2 and higher (to be ordered separately) No Yes No No No Yes; V11 SP2 or higher Yes; V11 SP2 or higher
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software • Configuration tool • WinCC flexible Compact • WinCC flexible Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Professional (TIA Portal)	Yes Yes Yes WinCC flexible Standard Version 2008 SP2 and higher (to be ordered separately) No Yes No No Yes; V11 SP2 or higher Yes; V11 SP2 or higher Yes; V11 SP2 or higher
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software • Configuration tool • WinCC flexible Compact • WinCC flexible Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Professional (TIA Portal) • WinCC Professional (TIA Portal)	Yes Yes Yes Yes WinCC flexible Standard Version 2008 SP2 and higher (to be ordered separately) No Yes No No No Yes; V11 SP2 or higher Yes; V11 SP2 or higher
Message indicator Alarm system (incl. buffer and acknowledgment) Process value display (output) Process value default (input) possible Recipe management Configuration software • Configuration tool • WinCC flexible Compact • WinCC flexible Standard • WinCC flexible Advanced • WinCC Basic (TIA Portal) • WinCC Comfort (TIA Portal) • WinCC Advanced (TIA Portal) • WinCC Professional (TIA Portal)	Yes Yes Yes WinCC flexible Standard Version 2008 SP2 and higher (to be ordered separately) No Yes No No Yes; V11 SP2 or higher Yes; V11 SP2 or higher Yes; V11 SP2 or higher

ibraries	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
/ariables	
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
mages	
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	Ves
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	Yes
Card	
 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
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