SIEMENS

Data sheet

6AV6645-0EF01-0AX1



**** 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)

Figure similar

General information	
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 eventy voltage	
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
	Tes
Time of day	
Clock	V.
Hardware clock (real-time)	Yes
retentive	Yes
synchronizable	Yes
Interfaces	
Interfaces/bus type	1x Ethernet (RJ45)
Interfaces/bus type Number of industrial Ethernet interfaces	1
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces	1 0
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces	1 0 0
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces	1 0 0 1
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces	1 0 0 1 1
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot	1 0 0 1
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot WLAN	1 0 0 1 1 1 MMC/SD card slot
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot WLAN • Wireless LAN	1 0 0 1 1 1 MMC/SD card slot Yes
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot WLAN • Wireless LAN • Supports rapid roaming	1 0 0 1 1 1 MMC/SD card slot
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot WLAN • Wireless LAN • Supports rapid roaming Protocols	1 0 0 1 1 1 MMC/SD card slot Yes Yes
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot WLAN • Wireless LAN • Supports rapid roaming Protocols Supports protocol for PROFINET IO	1 0 0 1 1 1 1 MMC/SD card slot Yes Yes
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot WLAN • Wireless LAN • Supports rapid roaming Protocols Supports protocol for PROFINET IO PROFIsafe	1 0 0 1 1 1 MMC/SD card slot Yes Yes
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot WLAN • Wireless LAN • Supports rapid roaming Protocols Supports protocol for PROFINET IO PROFISafe PROFIBUS	1 0 0 1 1 1 1 MMC/SD card slot Yes Yes
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot WLAN • Wireless LAN • Supports rapid roaming Protocols Supports protocol for PROFINET IO PROFIBUS Protocols (Ethernet)	1 0 0 1 1 1 1 MMC/SD card slot Yes Yes Yes No
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot WLAN • Wireless LAN • Supports rapid roaming Protocols Supports protocol for PROFINET IO PROFISafe PROFIBUS	1 0 0 1 1 1 1 MMC/SD card slot Yes Yes Yes Yes
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Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot WLAN • Wireless LAN • Supports rapid roaming Protocols Supports protocol for PROFINET IO PROFISafe PROFIBUS Protocols (Ethernet) • TCP/IP	1 0 0 1 1 1 1 MMC/SD card slot Yes Yes Yes No
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Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot WLAN • Wireless LAN • Supports rapid roaming Protocols Supports protocol for PROFINET IO PROFISATE PROFIBUS Protocols (Ethernet) • TCP/IP Further protocols • MODBUS	1 0 0 1 1 1 1 1 1 1 1 1 MMC/SD card slot Yes Yes Yes Yes Yes No No No
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot WLAN • Wireless LAN • Supports rapid roaming Protocols Supports protocol for PROFINET IO PROFISAFE PROFIBUS Protocols (Ethernet) • TCP/IP Further protocols • MODBUS • other bus systems	1 0 0 1 1 1 1 1 1 1 1 1 MMC/SD card slot Yes Yes Yes Yes Yes No No No
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot WLAN • Wireless LAN • Supports rapid roaming Protocols Supports protocol for PROFINET IO PROFISafe PROFIBUS Protocols (Ethernet) • TCP/IP Further protocols • MODBUS • other bus systems communication functions / header	1 0 0 1 1 1 1 1 1 1 1 1 MMC/SD card slot Yes Yes Yes Yes Yes No No No
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot WLAN • Wireless LAN • Supports rapid roaming Protocols Supports protocol for PROFINET IO PROFISafe PROFIBUS Protocols (Ethernet) • TCP/IP Further protocols • MODBUS • other bus systems Communication functions / header Wireless communication	1 0 0 1 1 1 1 1 1 1 1 1 MMC/SD card slot Yes Yes Yes Yes Yes No No No
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of vireless interfaces Multimedia card/SD card slot WLAN • Wireless LAN • Supports rapid roaming Protocols Supports protocol for PROFINET IO PROFISATE PROFIBUS Protocols (Ethernet) • TCP/IP Further protocols • MODBUS • other bus systems communication functions / header Wireless communication • supported standards	1 0 0 1 1 1 1 1 1 1 1 MMC/SD card slot Yes Yes Yes Yes No No No No No
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot WLAN • Wireless LAN • Supports rapid roaming Protocols Supports protocol for PROFINET IO PROFISAFE PROFIBUS Protocols (Ethernet) • TCP/IP Further protocols • MODBUS • other bus systems communication functions / header Wireless communication • supported standards — Radio standard WLAN 802.11	1 0 0 1 1 1 1 1 1 1 1 MMC/SD card slot Yes Yes Yes Yes No No No No No
Interfaces/bus type Number of industrial Ethernet interfaces Number of RS 485 interfaces Number of RS 422 interfaces Number of USB interfaces Number of wireless interfaces Multimedia card/SD card slot WLAN • Wireless LAN • Supports rapid roaming Protocols Supports protocol for PROFINET IO PROFISafe PROFIBUS Protocols (Ethernet) • TCP/IP Further protocols • MODBUS • other bus systems communication functions / header Wireless communication • supported standards Radio standard WLAN 802.11 EMC	1 0 0 1 1 1 1 1 1 1 1 MMC/SD card slot Yes Yes Yes Yes No No No No No

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.	0° 00
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
	80
 Number of characters per message Number of process values per message 	8
Acknowledgment groups	0
- Number of acknowledgement groups	99
Message indicator	Yes
First/last value	Yes
Recipe management	165
Number of recipes	300
Data records per recipe	500
Entries per data record	1 000
Recipe memory	64 KB integrated Flash, expandable
Variables	of ND integrated ridsh, expandable
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
Solostar awitahaa par imaga	
 — Selector switches per image Number of decade switches per project 	200 200

— Decade switches per image	200
Number of signal lamps per project	200
— Signal lamps per image	200
Attributes for dynamic objects	200
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 graphics per graphics list	256
Archiving	200
Number of archives per device	20
Number of measuring points per project	20
Number of entries per archive	10 000
Manual of entries per archive Message archive	Yes
Process value archive	Yes
Archiving methods	
Archiving methods — Sequential archive	Yes
— Sequential archive — Short-term archive	Yes
Memory location	MultiMediaCard
Data storage format	Multimedidodid
- CSV	Yes
Online evaluation	
using trend curves	Yes
Filters	165
• cyclic	Yes
Tolerance	Yes
Change	Yes
Security	165
Number of user groups	50
Number of user groups Number of user rights	32
Password export/import	Yes
Logging through printer	103
Recording/Printing	Alarms, report (shift report), PROFINET
Transfer (upload/download)	
Transfer of configuration	USB, Ethernet, automatic transfer recognition
Wireless LAN	Yes
Process coupling	163
Connection to controller	S7-200, S7- 300/400 see section on "System interfaces"
S7-1200	Yes
• S7-1200 • S7-1500	Yes; As of V13 SP1 Update 4, PROFIsafe communication also possible
• S7-200	Yes
- Ethernet	Yes
• S7-300/400	Yes
• \$7-500/400 — PROFINET	Yes
SIMOTION	Yes; WinCC flexible 2008 SP3 or higher
• Zones	Yes
 Zones — Number of zones per project, max. 	254
 — Number of zones per project, max. — Number of transponders for zones per project, 	255
max.	200
Effective range	Yes
— Number of effective ranges per project, max.	127
— Number of transponders for effective ranges	127
per project, max.	
• 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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