

*** spare part *** SIMATIC Mobile Panel 277 with integrated acknowledgment button, stop pushbutton, Handwheel, keyswitch and two illuminated push-buttons, configurable with WinCC flexible Standard Version 2005 SP1 or higher or TIA Portal V11 to V14

General information	
Product type designation	Mobile Panel 277
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
• hexadecimal 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	
• Stop button	Yes
• Acknowledgement button	Yes
• Key-operated switch	Yes
• Illuminated pushbutton	Yes; Two illuminated pushbuttons
• Handwheel	Yes
Supply voltage	
Design of the power supply	via connection box
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	
Buffer battery	Yes; maximum buffer time 10 min
Time of day	

Clock	
• Hardware clock (real-time)	Yes
• retentive	Yes
• synchronizable	Yes
Interfaces	
Interfaces/bus type	1x RS 422, 1x RS 485, 1x Ethernet (RJ45) (max. 12 Mbit/s)
Number of industrial Ethernet interfaces	1
Number of RS 485 interfaces	1
Number of RS 422 interfaces	1
Number of USB interfaces	1
Number of wireless interfaces	0
Multimedia card/SD card slot	1 MMC/SD card slot
Protocols	
Supports protocol for PROFINET IO	Yes
PROFIsafe	No
PROFIBUS	Yes
EtherNet/IP	Yes
AS-Interface	No
Protocols (Ethernet)	
• TCP/IP	Yes
Further protocols	
• MODBUS	Yes
• other bus systems	Yes
communication functions / header	
Wireless communication	
• supported standards	
— Radio standard WLAN 802.11	No
Standards, approvals, certificates	
Certificate of suitability	CE, cULus, C-TICK, SIBE
CE mark	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
Suitable for safety functions	Yes
Highest safety class achievable in safety mode	
• Performance level according to ISO 13849-1	d
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 2005 SP1 or higher (to be ordered separately)
• WinCC flexible Compact	No
• WinCC flexible Standard	Yes
• WinCC flexible Advanced	Yes
• WinCC Basic (TIA Portal)	No

- WinCC Comfort (TIA Portal) Yes
- WinCC Advanced (TIA Portal) Yes
- WinCC Professional (TIA Portal) Yes

Languages

Online languages

- Number of online/runtime languages 16

Project languages

- Languages per project 32

Functionality under WinCC (TIA Portal)

Libraries

Applications/options Internet Explorer, Sm@rtService, Sm@rtAccess

- Web browser Yes
- SIMATIC WinCC Sm@rtServer Yes
- Connection point identification Yes

Number of Visual Basic Scripts

Task planner

Help system

- 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
- System event, more (SIMATIC S7, SINUMERIK, SIMOTION, ...) 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), color print, hardcopy
Transfer (upload/download)	
• Transfer of configuration	MPI/PROFIBUS DP, USB, Ethernet, automatic transfer recognition
Process coupling	
• Connection to controller	S5, S7-200, S7-300/400, TI 505, SINUMERIK, SIMOTION, Allen Bradley (DF1), Allen Bradley (DF485), Mitsubishi (FX), OMRON (LINK/Multilink), Modicon (Modbus), further non-Siemens drivers, see chapter "System interfaces"
• S7-1200	Yes
• S7-1500	Yes
• S7-200	Yes
— PPI (point-to-point)	Yes
— PPI network	Yes
— MPI	Yes
— PROFIBUS DP	Yes
— Ethernet	Yes
• S7-300/400	Yes
— MPI	Yes
— PROFIBUS DP	Yes
— PROFINET	Yes
• SINUMERIK	Yes
• SIMOTION	Yes
• S5	Yes
— serial	Yes
— PROFIBUS DP	Yes
• TI 505	Yes
• Allen Bradley (DF1)	Yes
• Allen Bradley (DF485)	Yes
• Mitsubishi (FX)	Yes
• Mitsubishi (MP4)	Yes
• OMRON (LINK/Multilink)	Yes
• Modicon (Modbus)	Yes
• GE-Fanuc (SNP)	Yes
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	Printer, barcode reader
Printer	Yes
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)	1.7 kg

Classifications

	Version	Classification
eClass	14	27-33-02-02
eClass	12	27-33-02-02
eClass	9.1	27-33-02-02
eClass	9	27-33-02-02
eClass	8	27-24-23-03
eClass	7.1	27-24-23-03
eClass	6	27-24-23-03
ETIM	9	EC001427
ETIM	8	EC001427
ETIM	7	EC001427
IDEA	4	6607
UNSPSC	15	43-21-15-06

Approvals / Certificates

General Product Approval

[Manufacturer Declaration](#)


EG-Konf.



[Miscellaneous](#)

[KC](#)


RCM

EMV Functional Safety Radio Equipment Type Approval Certificate


RCM

[Type Examination Certificate](#)

[Miscellaneous](#)

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