

SIMATIC MOBILE PANEL 277 W. INTEGRATED ENABLING BUTTON, STOP BUTTON, HANDWHEEL, KEY SWITCH AND TWO ILLUMINATED PUSHBUTTON, CONFIGURABLE W. WINCC FLEXIBLE STANDARD VERSION 2005 SP1 AND HIGHER OR TIA PORTAL V11 AND HIGHER



General information	
Customer-specific configuration	Yes
Display	
Design of display	TFT
Screen diagonal	7.5 in
Number of colors	65 536
Color type	Colors
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
• System keys	Yes
• Numeric/alphabetical input	Yes / Yes
— hexadecimal keyboard	Yes
• Multi-key operation	Yes
— Number of multi-key operations	2
<b>Touch operation</b>	
• Design as touch screen	Yes; analog, resistive
<b>Connection type</b>	
• Connection for mouse/keyboard/barcode reader	USB / USB / USB
<b>Special operator controls</b>	
• Stop button	Yes
• Acknowledgement button	Yes
• Key-operated switch	Yes
• Illuminated pushbutton	Yes; Two illuminated pushbuttons
• Handwheel	Yes
<b>Supply voltage</b>	
Design of the power supply	via connection box
Type of supply voltage	DC
<b>Processor</b>	
Processor type	ARM, 520 MHz
<b>Memory</b>	
Type of memory	Flash / RAM
Memory available for user data	6 Mbyte
Main memory	
• Capacity of main memory, max.	128 Mbyte
<b>Time of day</b>	
<b>Clock</b>	
• Type	Hardware clock, battery backup, synchronizable
• Hardware clock (real-time)	Yes
• retentive	Yes
• synchronizable	Yes
<b>Interfaces</b>	
Interfaces/bus type	1 x RS422, 1 x RS485, 1 x Ethernet (RJ45) (max. 12 Mbit/s)
Number of RS 485 interfaces	1
• Transmission rate, max.	12 Mbit/s
Number of USB interfaces	1

Number of parallel interfaces	0
USB port	1 x USB
Multimedia card/SD card slot	1 MMC/SD card slot
<b>Industrial Ethernet</b>	
• Industrial Ethernet interface	1 x Ethernet (RJ45)
<b>Protocols</b>	
PROFINET	Yes
Supports protocol for PROFINET IO	Yes
PROFIsafe	No
PROFIBUS	Yes
AS-Interface	No
<b>Protocols (Ethernet)</b>	
• TCP/IP	Yes
<b>Further protocols</b>	
• CAN	No
• Data-Highway	No
• DeviceNet	No
• INTERBUS	No
• Local Operating Network	No
• MODBUS	Yes
• SUCOnet	No
• other bus systems	Yes
<b>Degree and class of protection</b>	
Enclosure according to EN 60529	IP65
<b>Standards, approvals, certificates</b>	
Certifications	CE, cULus, C-TICK, SIBE
CE mark	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
<b>Highest safety class achievable in safety mode</b>	
• Performance level according to ISO 13849-1	d
<b>Ambient conditions</b>	
<b>Free fall</b>	
• Fall height, max.	1.2 m
<b>Ambient temperature during operation</b>	
• min.	0 °C
• max.	40 °C
<b>Ambient temperature during storage/transportation</b>	
• min.	-20 °C
• max.	60 °C
<b>Relative humidity</b>	

- 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

- 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
- Configuration tool WinCC flexible Standard Version 2005 SP1 or higher (to be ordered separately)
- 2. Configuration kit WinCC flexible Standard
  - Version Version 2005 SP 1
  - Configuration tool WinCC flexible
  - Type Standard

## 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

- Connection point identification 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
- 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
• System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)	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
<b>Recipe management</b>	
• Number of recipes	300
• Data records per recipe	500
• Entries per data record	1 000
• Recipe memory	64 KB integrated Flash, expandable
<b>Variables</b>	
• 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
<b>Images</b>	
• Number of configurable images	500
• Permanent window/default	Yes
• Start screen configurable	Yes
• Image selection by PLC	Yes
• Image number in the PLC	Yes
<b>Image objects</b>	
• 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
<b>Complex image objects</b>	

• 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
<b>Attributes for dynamic objects</b>	
• Color change	Yes
• X/Y movement	Yes
• Hide	Yes
<b>Lists</b>	
• 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
<b>Archiving</b>	
• 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
<b>Filters</b>	
• cyclic	Yes
• Tolerance	Yes
• Change	Yes
<b>Security</b>	
• Number of user groups	50
• Number of user rights	32
• Password export/import	Yes
<b>Logging through printer</b>	
• Recording/Printing	Alarms, report (shift report), color print, hardcopy
<b>Transfer (upload/download)</b>	
• Transfer of configuration	MPI/PROFIBUS DP, USB, Ethernet, automatic transfer recognition
<b>Process coupling</b>	
• 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), weitere Fremdtreiber siehe Kapitel "Systemkopplungen"
• 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

• 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
<b>Functions</b>	
• TAB sequence	Yes
• Calculating functions	Yes
• Animate	Yes
<b>Service tools/configuration aids</b>	
• Clean screen	Yes
• Touch calibration	Yes
• Backup/Restore manually	Yes
• Simulation	Yes
• Device switchover	Yes
• Delta transfer	Yes
<b>Peripherals/Options</b>	
Peripherals	Printer, 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
<b>Mechanics/material</b>	
Type of housing (front)	plastic
<b>Dimensions</b>	
Enclosure diameter	290 mm
Depth of housing	103 mm
<b>Weights</b>	
Weight (without packaging)	1.7 kg
<b>Other</b>	
free hotline	Yes
Warranty period	1 y



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