

SIMATIC MOBILE PANEL 277 WITH INTEGRATED ENABLING BUTTON AND STOP BUTTON, CONFIGURABLE WITH WINCC FLEXIBLE STANDARD VERSION 2005 SP1 AND HIGHER OR TIA PORTAL V11 AND HIGHER



## General information

Customer-specific configuration	Yes
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## Display

Design of display	TFT
Screen diagonal	7.5 in
Number of colors	65 536
Color type	Colors
<b>Resolution (pixels)</b>	
• Horizontal image resolution	640
• Vertical image resolution	480
• Resolution (WxH in pixel)	640 x 480

## Backlighting

• MTBF backlighting (at 25 °C)	50 000 h
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## Control elements

### Keyboard

• Membrane keyboard	Yes
— freely inscribable membrane keys	Yes
• Function keys	18 function keys, 18 with LEDs
— Number of function keys	18
— Number of function keys with LEDs	18
— Multi-key operation	Yes
— Number of multi-key operations	2
• Keys with LED	Yes
• System keys	Yes

— Number of configurable system keys	18
• Numeric/alphabetical input	Yes / Yes
— hexadecimal keyboard	Yes
<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	No
• Illuminated pushbutton	No
• Handwheel	No
<b>Supply voltage</b>	
Description	via connection box
Type of supply voltage	DC
<b>Processor</b>	
Processor type	ARM, 520 MHz
<b>Memory</b>	
Type of memory	Flash / RAM
Usable memory 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 clock)	Yes
• Software clock	No
• Battery-backed	Yes
• Synchronizable	Yes
<b>Interfaces</b>	
Interface/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
Multi Media Card slot	1 MMC/SD card slot
<b>Industrial Ethernet</b>	

- Industrial Ethernet interface

1 x Ethernet (RJ45)

### Protocols

PROFINET	Yes
PROFINET IO	Yes
Supports protocol for PROFI-safe	No
PROFIBUS	Yes
AS-Interface	No

### Protocols (Ethernet)

• TCP/IP	Yes
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### Further protocols

• CAN	No
• INTERBUS	No
• MODBUS	Yes
• Data highway	No
• DeviceNet	No
• Local Operating Network	No
• SUCOnet	No
• other bus systems	Yes

### Degree and class of protection

Enclosure according to EN 60529	IP65
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### Standards, approvals, certificates

Certifications	CE, cULus, C-TICK, SIBE
CE mark	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes

### Highest safety class achievable in safety mode

• Performance level according to EN ISO 13849-1:2008	d
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### Ambient conditions

Free fall	
• Fall height, max.	1.2 m
Ambient temperature in operation	
• Min.	0 °C
• max.	40 °C
Storage/transport temperature	
• Min.	-20 °C
• max.	60 °C
Relative humidity	
• Operation, max.	80 %

### Operating systems

Operating system	Windows CE
<b>Configuration</b>	
Message indicator	Yes
Alarm logging system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes
Recipe administration	Yes
<b>Configuration software</b>	
• 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)
• 2nd configuration kit	WinCC flexible Standard
— Version	Version 2005 SP 1
— Configuration tool	WinCC flexible
— Type	Standard
<b>Languages</b>	
<b>Online languages</b>	
• Number of online/runtime languages	16
<b>Languages</b>	
• Languages per project	32
<b>Functionality under WinCC (TIA Portal)</b>	
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
<b>Message system</b>	
• 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
• Message length (in characters)	80
• Lines	1
• Number of process values per message	8
• Acknowledgment groups	
— Number of acknowledgement groups	99
• Message indicator	Yes
• First/last value	Yes
<b>Recipe administration</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
• Limit values	Yes
• Multiplexing	Yes
• Structs	Yes
• Type Date & Time	2 048
<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	With SIMATIC S7

• dynamic objects	Diagrams, bar graphs, sliders, analog display, invisible buttons
— Number of objects per project	1 000
— Number per image	10
• Methods	Trend / profile
• Limit value lines	Yes
• Number of bars per chart	10
• Limit value lines	Yes
• alphanumeric fields	300
• alphanumeric fields per image	200
• numerical fields	2 048
• numerical fields per image	200
• Password errors	2 048
• Number of slides per image	10
• Number of analog indicators per image	10
• Number of visible switches per project	200
• visible switches per image	200
• hidden switches per image	200
• Number of status switches per project	200
• Button 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	Yes
— Sequential archive	Yes
— Short-term archive	MultiMediaCard
• Memory location	
• Data storage format	Yes
— CSV	
• Online evaluation	Yes
— via trends	
<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	Yes
• Simulation	Yes
• Device switchover	Yes
• Delta transfer	Yes
<b>I/O / Options</b>	
I/O devices	Printer, barcode reader
• MultiMediaCard	Yes
• SD card	Yes
• USB memory	Yes
Additional software components loadable	Yes
<b>Mechanics/material</b>	
Type of housing (front)	plastic
<b>Dimensions</b>	
Housing diameter/depth (mm)	Dia 290 mm / D 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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