

SIMATIC MOBILE PANEL 277 W. INTEGRATED ENABLING 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

Resolution (pixels)

• Horizontal image resolution	640 Pixel
• Vertical image resolution	480 Pixel
• Resolution (WxH in pixel)	640 x 480

Backlighting

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

Control elements	Keys and Touch
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Keyboard fonts

• Membrane keyboard	
— user-definable label membrane keys	Yes

<ul style="list-style-type: none"> • Function keys <ul style="list-style-type: none"> — Number of function keys — Number of function keys with LEDs • Keys with LED • System keys <ul style="list-style-type: none"> — Number of configurable system keys • Numeric/alphabetical input <ul style="list-style-type: none"> — hexadecimal keyboard • Multi-key operation <ul style="list-style-type: none"> — Number of multi-key operations 	18 function keys, 18 with LEDs 18 18 Yes Yes 18 Yes / Yes Yes Yes 2
Touch operation	
<ul style="list-style-type: none"> • Design as touch screen 	Yes; analog, resistive
Connection type	
<ul style="list-style-type: none"> • Connection for mouse/keyboard/barcode reader 	USB / USB / USB
Special operator controls	
<ul style="list-style-type: none"> • Stop button • Acknowledgement button • Key-operated switch • Illuminated pushbutton • Handwheel 	No Yes No No No
Supply voltage	
Description	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
Main memory <ul style="list-style-type: none"> • Capacity of main memory, max. 	128 Mbyte
Time of day	
Clock	
<ul style="list-style-type: none"> • Type • Hardware clock (real-time clock) • Software clock • retentive • synchronizable 	Hardware clock, battery backup, synchronizable Yes No Yes Yes
Interfaces	
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 slot	1 MMC/SD card slot
Industrial Ethernet	
• Industrial Ethernet interface	1 x Ethernet (RJ45)
Protocols	
PROFINET	Yes
Supports protocol for PROFINET IO	Yes
PROFIsafe	No
PROFIBUS	Yes
AS-Interface	No
Protocols (Ethernet)	
• TCP/IP	Yes
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
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
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	
Operating system	Windows CE
Configuration	
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
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
• 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
Recipe administration	
• 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
• Limit values	Yes
• Multiplexing	Yes
• Structures	Yes
• Type Date & Time	2 048
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	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
• 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 fields	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
• 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, Win AC, PC (TCP/IP), 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
• 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
• 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	
Type of housing (front)	plastic
Dimensions	
Enclosure diameter	290 mm
Depth of housing	103 mm
Weights	

Weight (without packaging)	1.7 kg
Other	
free hotline	Yes
Warranty period	1 y
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