

SIMATIC MP 377 15" TOUCH STAINLESS STEEL FRONT, RETENTIV DISPLAY COVERED BY MEMBRANE, PROT. CL. FRONT IP66K, EX 2/22 15" TFT DISPLAY, CONFIGURABLE WITH WINCC FLEXIBLE



Display	
Design of display	TFT
Screen diagonal	15 in
Number of colors	65 536
Color type	Colors
Resolution (pixels)	
• Horizontal image resolution	1 024 Pixel
• Vertical image resolution	768 Pixel
Backlighting	
• MTBF backlighting (at 25 °C)	50 000 h
Control elements	
Control elements	Touch screen
Keyboard fonts	
• Membrane keyboard	
— user-definable label membrane keys	No
• Numeric/alphabetical input	Yes / Yes
— hexadecimal keyboard	Yes
• Multi-key operation	No

— Number of multi-key operations	0
Touch operation	
• Design as touch screen	Yes; analog, resistive
Connection type	
• Connection for mouse/keyboard/barcode reader	USB / USB / USB
Installation type/mounting	
maximum permissible angle of inclination without external ventilation	35°
Input current	
Current consumption (rated value)	1.7 A; Typical
Starting current inrush I ² t	4 A ² ·s
Power	
Active power input, typ.	41 W
Memory	
Type of memory	Flash / RAM
Memory available for user data	12 288 kbyte
Time of day	
Clock	
• Type	Hardware clock, battery backup, synchronizable
• retentive	Yes; via Goldkap for at least 6 weeks
• synchronizable	Yes
Interfaces	
Interfaces/bus type	1 x RS422, 1 x RS485, 2 x Ethernet (RJ45) (max. 12 Mbit/s)
Number of RS 485 interfaces	1
• Transmission rate, max.	12 Mbit/s
USB port	2 x USB
PC card slot	No
CF card slot	1 x CF card slot
Multimedia card/SD card slot	1x Multimedia Card slot, up to 128 MB
Industrial Ethernet	
• Industrial Ethernet interface	2 x Ethernet (RJ45)
Protocols	
PROFIBUS	Yes
MPI	Yes
Protocols (Ethernet)	
• TCP/IP	Yes
Protocols (terminal link)	
• Sm@rtServer	Yes
EMC	

Emission of radio interference acc. to EN 55 011	
• Limit class A, for use in industrial areas	Yes
Degree and class of protection	
Front	IP66K
IP (at the front)	IP66K
IP (rear)	IP20
Standards, approvals, certificates	
Certifications	CE, FM Class I Div. 2, UL, cULus, EX Zone 2, EX Zone 22, C-TICK
cULus	Yes
EAC (formerly Gost-R)	No
EMC	The product is designed for use in industrial environments. When used in residential areas, the emission of radio interference according to limit class B of EN 55011 must be ensured. For further information refer to the user documentation
Marine approval	
• Germanischer Lloyd (GL)	No
• American Bureau of Shipping (ABS)	No
• Bureau Veritas (BV)	No
• Det Norske Veritas (DNV)	No
• Lloyds Register of Shipping (LRS)	No
• Polski Rejestr Statkow (PRS)	No
Use in hazardous areas	
• FM Class I Division 2	Yes
• EX zone 2	Yes
• EX zone 22	Yes
Ambient conditions	
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C
Relative humidity	
• Operation, max.	90 %
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	

• STEP 7 Basic (TIA Portal)	No
• STEP 7 Professional (TIA Portal)	No
• 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 2007 or higher (to be ordered separately)

Languages

Online languages	
• Number of online/runtime languages	16
Project languages	
• Languages per project	32

Functionality under WinCC (TIA Portal)

Libraries	Yes
Number of Visual Basic Scripts	
• Debugging in the simulator	No
Task planner	Yes
Help system	Yes
• Number of characters per info text	70
• Number of tooltips	0
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
• Telegram message procedure Alarm S	Yes
• 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	Yes
• Message indicator	Yes

• acoustic feedback	No
• First/last value	Yes
Recipe management	
• Number of recipes	500
• Data records per recipe	1 000
• Entries per data record	1 000
• Recipe memory	128 KB integrated Flash, expandable
Variables	
• Number of variables per device	4 096; Configuration with WinCC flexible 2008 and higher
• Number of variables per screen	400
• Number of variables	2 000
• 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	30000 text elements
• Number of I/O fields per image	400
• Number of date/time fields	400
• Index of screen context	No
• Return	Yes
• Graphics object	Bit maps, icons, vector graphics
— Icons	2 000
— Icon (full screen)	0
Complex image objects	
• Status/control	With SIMATIC S7
• dynamic objects	Diagrams, bar graphs, sliders, analog display, invisible buttons
— Number of objects per project	2 000
— Number of curve diagrams per image	20
• Methods	Trend / profile
• Bar graphs	
— Number of bars per chart	20
• Sliders	
— Number of slides per image	20

• Pointer instruments	
— Number of analog indicators per image	20
• Limit value lines	Yes
• Number of alphanumeric fields	300
— alphanumeric fields per image	400
• Number of numerical fields	2 048
— numerical fields per image	400
• Number of password fields	2 048
• Number of visible switches per project	400
— visible switches per image	400
— hidden switches per image	400
• Number of status switches per project	400
— Number of status switches per image	400
• Number of selector switches per project	400
— Selector switches per image	400
• Number of decade switches per project	0
— Decade switches per image	0
• Number of signal lamps per project	400
— Signal lamps per image	400

Attributes for dynamic objects

• Color change	Yes
• X/Y movement	Yes
• Hide	Yes
• Angle of rotation	No

Lists

• Number of text lists per project	500
• Number of text lists per image	400
• Number of entries per text list	256
• Number of graphics lists per project	500
• Number of graphic lists per image	400
• Number of entries per graphics list	256

Archiving

• Number of archives per device	50
• Number of measuring points per project	50
• Number of entries per archive	50 000
• Message archive	Yes
• Process value archive	Yes
• Archiving methods	Yes
— Sequential archive	Yes
— Short-term archive	Yes
• Memory location	Yes

— CF card	Yes
— USB memory	No
— Ethernet	Yes
• Data storage format	Yes
— CSV	Yes
— TXT	No
• external evaluation	Yes
• Size of archive	Yes
• Online evaluation	Yes
— 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
Data carrier support	
• PC card	No
• CF card	Yes
• Hard disk	Yes; Only USB hard disks with external power supply
Logging through printer	
• Recording/Printing	Alarms, report (shift report), color print, hardcopy
Transfer (upload/download)	
• Transfer of configuration	MPI/PROFIBUS DP, serial, USB, Ethernet, by means of external storage medium, 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
• S7-300/400	Yes
— MPI	Yes

— PROFIBUS DP	Yes
— PROFINET	Yes
• S5	Yes
— serial	No
— PROFIBUS DP	Yes
• TI 505	Yes
• Allen Bradley (DF1)	Yes
• Allen Bradley (DF485)	Yes
• Mitsubishi (FX)	Yes
• Mitsubishi (MP4)	Yes
• Telemecanique (ADJUST)	No
• Telemecanique (Uni-Telway)	Yes
• OMRON (LINK/Multilink)	Yes
• Modicon (Modbus)	Yes
• GE-Fanuc (SNP)	Yes
Functions	
• Key repeat	No
• TAB sequence	Yes
• Calculating functions	Yes
• Animate	Yes
• Menu tree editor	No
• Unit switchover	No
Service tools/configuration aids	
• Clean screen	Yes
• Touch calibration	Yes
• Backup/Restore manually	Yes
• Simulation	Yes
• Device switchover	Yes
• Delta transfer	Yes
• Monitoring function for battery and memory	Yes
• Trace (operation archive)	No
Expandability/openness	
• Open Platform Program	Yes
Peripherals/Options	
Peripherals	Printer, card reader, 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

Dimensions

Width of the housing front	400 mm
Height of housing front	310 mm
Overall depth	75 mm

Weights

Weight (without packaging)	6.2 kg
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last modified: 04/28/2017