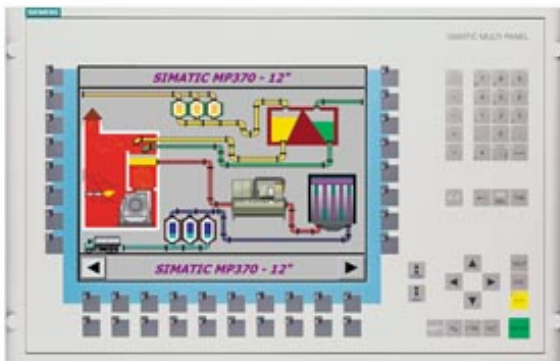


\*\*\* SPARE PART\*\*\* SIMATIC MULTIPANEL MP370 12" COLOR TFT DISPLAY, KEYS WINDOWS CE 3.0 CONFIGURABLE WITH PROTOOL FROM VERSION V5.2+SP3



General information	
Customer-specific configuration	No
Display	
Design of display	TFT, 256 colors
Screen diagonal	12.1 in
Resolution (pixels)	
• Horizontal image resolution	800 Pixel
• Vertical image resolution	600 Pixel
Backlighting	
• MTBF backlighting (at 25 °C)	50 000 h
Control elements	
Control elements	Membrane keyboard
Keyboard fonts	
• Membrane keyboard	Yes
— user-definable label membrane keys	Yes
• Function keys	
— Number of function keys	36
— Number of function keys with LEDs	36

• System keys	
— Number of system keys	38
• Numeric keyboard	Yes
• alphanumeric keyboard	Yes
• hexadecimal keyboard	Yes
• Multi-key operation	Yes
— Number of multi-key operations	36
<b>Touch operation</b>	
• Design as touch screen	No
<b>Connection type</b>	
• Connection for mouse/keyboard/barcode reader	USB / USB / USB
<b>Special operator controls</b>	
• Illuminated pushbutton	Yes
<b>Installation type/mounting</b>	
Mounting position	vertical
maximum permissible angle of inclination without external ventilation	35°
<b>Supply voltage</b>	
Type of supply voltage	DC
UPS connectable (serial)	Yes
<b>Input current</b>	
Current consumption (rated value)	1.15 A
Starting current inrush I <sup>2</sup> t	0.5 A <sup>2</sup> ·s
<b>Power</b>	
Active power input, typ.	28 W
<b>Processor</b>	
Processor type	MIPS
<b>Drives</b>	
Diskette drive	No
CD-ROM	No
Hard disk	No
<b>Memory</b>	
Type of memory	Flash / RAM
Memory available for user data	7 168 kbyte
<b>Battery</b>	
<b>Backup battery</b>	
• Backup battery (optional)	Yes; optional 3.6 V
• Backup time, min.	3 y

Type of output	
Info LED	Yes
Power LED	No
Error LED	Yes

Time of day	
Clock	
<ul style="list-style-type: none"> <li>Type</li> </ul>	Hardware clock, battery backup, synchronizable
<ul style="list-style-type: none"> <li>retentive</li> </ul>	Yes; yes, via optional battery
<ul style="list-style-type: none"> <li>synchronizable</li> </ul>	Yes

Interfaces	
Interfaces/bus type	1 x TTY, 2 x RS232, 1 x RS422, 1 x RS485, 1 x Ethernet (RJ45) (max. 12 Mbit/s)
Number of RS 485 interfaces	1
<ul style="list-style-type: none"> <li>Transmission rate, max.</li> </ul>	12 Mbit/s
USB port	Yes; 1 x USB
PC card slot	1 x PC card slot
CF card slot	1 x CF card slot
Industrial Ethernet	
<ul style="list-style-type: none"> <li>Industrial Ethernet interface</li> </ul>	1 x Ethernet (RJ45)

Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP20

Standards, approvals, certificates	
Certifications	CE, FM Class I Div. 2, cULus, EX Zone 2/22

Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>min.</li> </ul>	0 °C
<ul style="list-style-type: none"> <li>max.</li> </ul>	50 °C
Ambient temperature during storage/transportation	
<ul style="list-style-type: none"> <li>min.</li> </ul>	-20 °C
<ul style="list-style-type: none"> <li>max.</li> </ul>	60 °C
Relative humidity	
<ul style="list-style-type: none"> <li>Operation, max.</li> </ul>	85 %

Operating systems	
pre-installed operating system	Windows CE

Configuration	
Configuration software	
<ul style="list-style-type: none"> <li>Configuration tool</li> </ul>	ProTool Version 5.2 SP 3 or higher, or WinCC flexible Standard Version 2004 or higher (to be ordered separately)

Languages	
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Online languages	
• Number of online/runtime languages	5
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	2 048
• 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
<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	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
<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	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 alphanumerical fields	300
— alphanumerical 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	400
— Decade switches per image	400
• Number of signal lamps per project	400
— Signal lamps per image	400
<b>Attributes for dynamic objects</b>	
• Color change	Yes
• X/Y movement	Yes
• Hide	Yes
• Angle of rotation	No
<b>Lists</b>	
• 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
<b>Archiving</b>	
• 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	Sequence archive, circular log, alarm log, process value archive
— Sequential archive	Yes
— Short-term archive	Yes
• Memory location	PC card, CF card, Ethernet
— PC card	Yes
— CF card	Yes
— USB memory	No
— Ethernet	Yes
• Data storage format	CSV file, readable, e.g. with MS Excel, MS Access
— CSV	Yes
— TXT	No
• external evaluation	Readable, e.g. with MS Excel, MS Access, etc.
• Size of archive	depending on free memory on ext. card/stick or on free hard disk space via network drive
• Online evaluation	via trends
— 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	Yes
• CF card	Yes
• Diskette drive	No
• Hard disk	No
• CD-ROM	No
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), Telemecanique (ADJUST), OMRON (LINK/Multilink), Modicon (Modbus), for further non-Siemens drivers, see section on "System interfaces"
• 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	Yes
— PROFIBUS DP	Yes
• TI 505	Yes
• Allen Bradley (DF1)	Yes
• Allen Bradley (DF485)	Yes
• Mitsubishi (FX)	Yes
• Mitsubishi (MP4)	Yes

• Telemecanique (ADJUST)	Yes
• Telemecanique (Uni-Telway)	Yes
• OMRON (LINK/Multilink)	Yes
• Modicon (Modbus)	Yes
• GE-Fanuc (SNP)	Yes
<b>Functions</b>	
• Key repeat	Yes
• TAB sequence	Yes
• Calculating functions	Yes
• Animate	Yes
• Menu tree editor	No
• Unit switchover	No
<b>Service tools/configuration aids</b>	
• Clean screen	No
• Touch calibration	No
• Backup/Restore manually	Yes
• Simulation	Yes
• Device switchover	Yes
• Delta transfer	Yes
• Monitoring function for battery and memory	Yes
• Trace (operation archive)	No
<b>Expandability/openness</b>	
• Open Platform Program	Yes
<b>Peripherals/Options</b>	
Peripherals	Printer, barcode reader
• SIMATIC HMI MM memory card: Multi Media Card	No
• SIMATIC HMI SD memory card: Secure Digital memory card	No
• USB memory	No
<b>Dimensions</b>	
Width of the housing front	483 mm
Height of housing front	310 mm
Overall depth	59 mm
<b>Weights</b>	
Weight (without packaging)	5.1 kg
<b>Other</b>	
free hotline	Yes
Warranty period	1 y
<b>last modified:</b>	08/12/2017