



Figure similar

SIMATIC HMI TP1200 Comfort INOX Long stainless steel front, Continuous decorative film, Degree of protection front IP66K, 12" widescreen TFT display, PROFINET interface, MPI/PROFIBUS DP interface, 12 MB configuration memory, Windows CE 6.0, (Microsoft Support included Security updates discontinued) configurable from WinCC Comfort V11

General information	
Product type designation	TP1200 Comfort INOX LF
Display	
Design of display	TFT
Screen diagonal	12.1 in
Display width	261.1 mm
Display height	163.2 mm
Number of colors	16 777 216
Resolution (pixels)	
• Horizontal image resolution	1 280 pixel
• Vertical image resolution	800 pixel
Backlighting	
• MTBF backlighting (at 25 °C)	80 000 h
• Backlight dimmable	Yes; 0-100 %
Control elements	
Keyboard fonts	
• Function keys	
— Number of function keys	0
— Number of function keys with LEDs	0
• Keys with LED	No
• System keys	No
• Numeric keyboard	Yes; Onscreen keyboard
• alphanumeric keyboard	Yes; Onscreen keyboard
Touch operation	
• Design as touch screen	Yes
Expansions for operator control of the process	
• DP direct LEDs (LEDs as S7 output I/O)	
— F1...Fx	0
• Direct keys (keys as S7 input I/O)	
— F1...Fx	0
• Direct keys (touch buttons as S7 input I/O)	40
Installation type/mounting	
Mounting position	vertical
Mounting in portrait format possible	Yes
Mounting in landscape format possible	Yes
maximum permissible angle of inclination without external ventilation	35°
Supply voltage	

Type of supply voltage	DC
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
<b>Input current</b>	
Current consumption (rated value)	0.85 A
Starting current inrush I <sub>st</sub>	0.5 A <sup>2</sup> ·s
<b>Power</b>	
Active power input, typ.	20 W
<b>Processor</b>	
Processor type	X86
<b>Memory</b>	
Flash	Yes
RAM	Yes
Memory available for user data	12 Mbyte
<b>Type of output</b>	
Info LED	No
Power LED	No
Error LED	No
Acoustics	
• Buzzer	No
• Speaker	Yes
<b>Time of day</b>	
Clock	
• Hardware clock (real-time)	Yes
• Software clock	Yes
• retentive	Yes; Back-up duration typically 6 weeks
• synchronizable	Yes
<b>Interfaces</b>	
Number of industrial Ethernet interfaces	1; 2 ports (switch)
Number of RS 485 interfaces	1; RS 422 / 485 combined
Number of RS 422 interfaces	0; together with RS 485
Number of RS 232 interfaces	0
Number of USB interfaces	2; USB 2.0
• USB Mini B	1; 5-pole
Number of 20 mA interfaces (TTY)	0
Number of parallel interfaces	0
Number of other interfaces	0
Number of SD card slots	2
With software interfaces	No
<b>Industrial Ethernet</b>	
• Industrial Ethernet status LED	2
• Number of ports of the integrated switch	2
<b>Protocols</b>	
PROFINET	Yes
Supports protocol for PROFINET IO	Yes
IRT	Yes; As of WinCC V12
PROFIBUS	Yes
EtherNet/IP	Yes
MPI	Yes
<b>Protocols (Ethernet)</b>	
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
<b>WEB characteristics</b>	
• HTTP	Yes
• HTTPS	Yes

• HTML	Yes
• XML	Yes
• CSS	Yes
• Active X	Yes
• JavaScript	Yes
• Java VM	No
<b>Redundancy mode</b>	
<b>Media redundancy</b>	
— MRP	Yes; As of WinCC V12
<b>Further protocols</b>	
• CAN	No
• MODBUS	Yes
<b>EMC</b>	
<b>Emission of radio interference acc. to EN 55 011</b>	
• Limit class A, for use in industrial areas	Yes
• Limit class B, for use in residential areas	No
<b>Degree and class of protection</b>	
IP (at the front)	IP66K
IP (rear)	IP20
NEMA (front)	
• Enclosure Type 4 at the front	No
• Enclosure Type 4x at the front	Yes; indoor use only
<b>Standards, approvals, certificates</b>	
CE mark	Yes
cULus	Yes
FM approval	No
RCM (formerly C-TICK)	No
KC approval	No
EAC (formerly Gost-R)	Yes
<b>Use in hazardous areas</b>	
• ATEX Zone 2	Yes
• ATEX Zone 22	Yes
• IECEx Zone 2	Yes
• IECEx Zone 22	Yes
• cULus Class I Zone 1	No
• cULus Class I Zone 2, Division 2	Yes
• FM Class I Division 2	No
<b>Marine approval</b>	
• Germanischer Lloyd (GL)	No
• American Bureau of Shipping (ABS)	No
• Bureau Veritas (BV)	No
• Det Norske Veritas (DNV)	No
• Korean Register of Shipping (KRS)	No
• Lloyds Register of Shipping (LRS)	No
• Nippon Kaiji Kyokai (Class NK)	No
• Polski Rejestr Statkow (PRS)	No
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
<b>Operation (vertical installation)</b>	
— For vertical installation, min.	0 °C
— For vertical installation, max.	50 °C
<b>Operation (max. tilt angle)</b>	
— At maximum tilt angle, min.	0 °C
— At maximum tilt angle, min.	40 °C
<b>Operation (vertical installation, portrait format)</b>	
— For vertical installation, min.	0 °C
— For vertical installation, max.	40 °C
<b>Operation (max. tilt angle, portrait format)</b>	
— At maximum tilt angle, min.	0 °C

— At maximum tilt angle, min.	35 °C
Ambient temperature during storage/transportation	
• min.	-20 °C
• max.	60 °C
Relative humidity	
• Operation, max.	80 %; no condensation
Operating systems	
proprietary	No
pre-installed operating system	
• Windows CE	Yes
configuration / header	
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	No
• WinCC flexible Advanced	No
• WinCC Basic (TIA Portal)	No
• WinCC Comfort (TIA Portal)	Yes; from V11
• WinCC Advanced (TIA Portal)	Yes; from V11
• WinCC Professional (TIA Portal)	Yes; from V11
Languages	
Online languages	
• Number of online/runtime languages	32
Project languages	
• Languages per project	32
Functionality under WinCC (TIA Portal)	
Libraries	Yes
Applications/options	
• Web browser	Yes
• Pocket Word	Yes
• Pocket Excel	Yes
• PDF Viewer	Yes
• Media Player	Yes
• SIMATIC WinCC Sm@rtServer	Yes
• SIMATIC WinCC Audit	Yes
Number of Visual Basic Scripts	Yes
Task planner	
• time-controlled	Yes
• task-controlled	Yes
Message system	
• Number of alarm classes	32
• Bit messages	
— Number of bit messages	4 000
• Analog messages	
— Number of analog messages	200
• S7 alarm number procedure	Yes
• System messages HMI	Yes
• System event, more (SIMATIC S7, SINUMERIK, SIMOTION, ... )	Yes
• Number of characters per message	80
• Number of process values per message	8
• Acknowledgment groups	Yes
• Message indicator	Yes
Recipe management	

• Number of recipes	300
• Data records per recipe	500
• Entries per data record	1 000
• Size of internal recipe memory	2 Mbyte
• Recipe memory expandable	Yes
<b>Variables</b>	
• Number of variables per device	2 048
• Number of variables per screen	400
• Limit values	Yes
• Multiplexing	Yes
• Structures	Yes
• Arrays	Yes
<b>Images</b>	
• Number of configurable images	500
• Permanent window/default	Yes
• Global image	Yes
• Pop-up images	Yes
• Slide-in images	Yes
• Image selection by PLC	Yes
• Image number in the PLC	Yes
<b>Image objects</b>	
• Number of objects per image	400
• Text fields	Yes
• I/O fields	Yes
• Graphic I/O fields (graphics list)	Yes
• Symbolic I/O fields (text list)	Yes
• Date/time fields	Yes
• Switches	Yes
• Buttons	Yes
• Graphic display	Yes
• Icons	Yes
• Geometric objects	Yes
<b>Complex image objects</b>	
• Number of complex objects per screen	20
• Alarm view	Yes
• Trend view	Yes
• User view	Yes
• Status/control	Yes
• Sm@rtClient view	Yes
• Recipe view	Yes
• f(x) trend view	Yes
• System diagnostics view	Yes
• Media Player	Yes
• HTML browser	Yes
• PDF display	Yes
• IP camera display	Yes
• Bar graphs	Yes
• Sliders	Yes
• Pointer instruments	Yes
• Analog/digital clock	Yes
<b>Lists</b>	
• Number of text lists per project	500
• Number of entries per text list	500
• Number of graphics lists per project	500
• Number of entries per graphics list	500
<b>Archiving</b>	
• Number of archives per device	50
• Number of entries per archive	20 000
• Message archive	Yes
• Process value archive	Yes

<ul style="list-style-type: none"> <li>• Archiving methods <ul style="list-style-type: none"> <li>— Sequential archive</li> <li>— Short-term archive</li> </ul> </li> <li>• Memory location <ul style="list-style-type: none"> <li>— Memory card</li> <li>— USB memory</li> <li>— Ethernet</li> </ul> </li> <li>• Data storage format <ul style="list-style-type: none"> <li>— CSV</li> <li>— TXT</li> <li>— RDB</li> </ul> </li> </ul>	Yes Yes  Yes Yes Yes  Yes Yes Yes
<b>Security</b>	
<ul style="list-style-type: none"> <li>• Number of user groups</li> <li>• Number of user rights</li> <li>• Number of users</li> <li>• Password export/import</li> <li>• SIMATIC Logon</li> </ul>	50 32 50 Yes Yes
<b>Logging through printer</b>	
<ul style="list-style-type: none"> <li>• Alarms</li> <li>• Report (shift log)</li> <li>• Hardcopy</li> <li>• Electronic print to file</li> </ul>	Yes Yes Yes Yes; PDF, HTML
<b>Character sets</b>	
<ul style="list-style-type: none"> <li>• Keyboard fonts <ul style="list-style-type: none"> <li>— US English</li> </ul> </li> </ul>	Yes
<b>Transfer (upload/download)</b>	
<ul style="list-style-type: none"> <li>• MPI/PROFIBUS DP</li> <li>• USB</li> <li>• Ethernet</li> <li>• using external storage medium</li> </ul>	Yes Yes Yes Yes
<b>Process coupling</b>	
<ul style="list-style-type: none"> <li>• S7-1200</li> <li>• S7-1500</li> <li>• S7-200</li> <li>• S7-300/400</li> <li>• LOGO!</li> <li>• WinAC</li> <li>• SINUMERIK</li> <li>• SIMOTION</li> <li>• Allen Bradley (EtherNet/IP)</li> <li>• Allen Bradley (DF1)</li> <li>• Mitsubishi (MC TCP/IP)</li> <li>• Mitsubishi (FX)</li> <li>• OMRON (FINS TCP)</li> <li>• OMRON (LINK/Multilink)</li> <li>• Modicon (Modbus TCP/IP)</li> <li>• Modicon (Modbus)</li> <li>• OPC UA Client</li> <li>• OPC UA Server</li> </ul>	Yes Yes Yes Yes Yes Yes Yes; with SINUMERIK option package Yes Yes Yes Yes Yes Yes No Yes Yes Yes Yes Yes
<b>Service tools/configuration aids</b>	
<ul style="list-style-type: none"> <li>• Backup/Restore manually</li> <li>• Backup/Restore automatically</li> <li>• Simulation</li> <li>• Device switchover</li> </ul>	Yes Yes Yes Yes
<b>Peripherals/Options</b>	
Printer	Yes
SIMATIC HMI MM memory card: Multi Media Card	Yes; Up to 128 MB
SIMATIC HMI SD memory card: Secure Digital memory card	Yes; Up to 2 GB
SIMATIC HMI CF memory card Compact Flash Card	No

USB memory	Yes
SIMATIC IPC USB Flashdrive (USB stick)	Yes; Up to 16 GB
SIMATIC HMI USB stick	Yes; Up to 8 GB
Network camera	Yes
<b>Mechanics/material</b>	
Enclosure material (front)	
• Plastic	No
• Aluminum	No
• Stainless steel	Yes
<b>Dimensions</b>	
Width of the housing front	330 mm
Height of housing front	269 mm
Mounting cutout, width	310 mm
Mounting cutout, height	248 mm
Overall depth	67 mm
<b>Weights</b>	
Weight (without packaging)	4.2 kg
Weight (with packaging)	4.9 kg

**last modified:** 3/2/2021 