SIEMENS

Data sheet

SIMATIC HMI KP1200 Comfort, Comfort Panel, key operation, 12" widescreen TFT display, 16 million colors, PROFINET interface, MPI/PROFIBUS DP interface, 12 MB configuration memory, Windows CE 6.0, configurable from WinCC Comfort V11



General information	
Product type designation	KP1200 Comfort
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 	34
 Number of function keys with LEDs 	34
Keys with LED	Yes
System keys	Yes
 Numeric keyboard 	Yes
alphanumeric keyboard	Yes; similar to mobile phone
Touch operation	
Design as touch screen	No; without
Expansions for operator control of the process	
 DP direct LEDs (LEDs as S7 output I/O) 	
— F1Fx	34
 Direct keys (keys as S7 input I/O) 	
— F1Fx	34
 Direct keys (touch buttons as S7 input I/O) 	0
Installation type/mounting	
Mounting position	vertical
Wall mounting/direct mounting	No
Mounting in portrait format possible	No
Mounting in landscape format possible	Yes
maximum permissible angle of inclination without external ventilation	35°
Supply voltage	

Tune of cumply yealth	DC
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
Input current	
Current consumption (rated value)	0.85 A
Starting current inrush I²t	0.5 A²·s
Power	
Active power input, typ.	20 W
Processor	
Processor type	X86
Memory	
Flash	Yes
RAM	Yes
Memory available for user data	12 Mbyte
Type of output	
Info LED	Yes
Power LED	No
Error LED	No
Acoustics	
Buzzer	No
Speaker	Yes
Time of day	
Clock	
 Hardware clock (real-time) 	Yes
Software clock	Yes
retentive	Yes; Back-up duration typically 6 weeks
synchronizable	Yes
Interfaces	
	4.0 () () ()
Number of industrial Ethernet interfaces	1; 2 ports (switch)
Number of industrial Ethernet interfaces Number of RS 485 interfaces	1; 2 ports (switch) 1; RS 422 / 485 combined
Number of RS 485 interfaces	1; RS 422 / 485 combined
Number of RS 485 interfaces Number of RS 422 interfaces	1; RS 422 / 485 combined 1
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces	1; RS 422 / 485 combined 1 0
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY)	1; RS 422 / 485 combined 1 0 2; USB 2.0
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces	1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole
Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY)	1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0
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Number of RS 485 interfaces Number of RS 422 interfaces Number of RS 232 interfaces Number of USB interfaces • USB Mini B Number of 20 mA interfaces (TTY) Number of parallel interfaces Number of other interfaces Number of SD card slots With software interfaces	1; RS 422 / 485 combined 1 0 2; USB 2.0 1; 5-pole 0 0
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• HTML	Yes
• XML	Yes
• CSS	Yes
 Active X 	Yes
 JavaScript 	Yes
• Java VM	No
Redundancy mode	
Media redundancy	
— MRP	Yes; As of WinCC V12
Further protocols	
• CAN	No
• MODBUS	Yes
Interrupts/diagnostics/status information	
Diagnoses	
 Diagnostic information readable 	Yes; S7 controller
EMC	
Emission of radio interference acc. to EN 55 011	
Limit class A, for use in industrial areas	Yes
 Limit class B, for use in residential areas 	No
Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP20
NEMA (front)	
Enclosure Type 4 at the front	Yes
Enclosure Type 4x at the front	Yes
Standards, approvals, certificates	
CE mark	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
KC approval	Yes
Use in hazardous areas	Tes
ATEX Zone 2	Yes
• ATEX Zone 22	Yes
• IECEx Zone 2	Yes
• IECEX Zone 22	Yes
• cULus Class I Zone 1	
	No You
cULus Class I Zone 2, Division 2 FM Class I Division 3	Yes
FM Class I Division 2 Marine approval	Yes
Marine approval	Ves: As of product version: 10
Germanischer Lloyd (GL) American Burgau of Shipping (ABS)	Yes; As of product version: 10
American Bureau of Shipping (ABS) Rureau Veritas (RV)	Yes; As of product version: 10
Bureau Veritas (BV) Det Nereka Veritas (DNV)	Yes; As of product version: 10
Det Norske Veritas (DNV) Lloyde Register of Shipping (LRS)	Yes; As of product version: 10
Lloyds Register of Shipping (LRS) Nimon (Gill Victor) (Class NIC)	Yes; As of product version: 10
Nippon Kaiji Kyokai (Class NK) Poleki Painete Statkov (CDS)	Yes; As of product version: 10
Polski Rejestr Statkow (PRS)	No
Ambient conditions	
Ambient temperature during operation	
Operation (vertical installation)	
For vertical installation, min.	0 °C
— For vertical installation, max.	50 °C; (55 °C, see entry ID: 64847814)
Operation (max. tilt angle)	
At maximum tilt angle, min.	0 °C
— At maximum tilt angle, max.	40 °C
Operation (vertical installation, portrait format)	
For vertical installation, min.	0 °C
 For vertical installation, max. 	40 °C
Operation (max. tilt angle, portrait format)	
— At maximum tilt angle, min.	O°C

— At maximum tilt angle, max.	35 °C
Ambient temperature during storage/transportation	
min.	-20 °C
• max.	60 °C
Relative humidity	
Operation, max.	90 %; 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 per project	22
Languages per project Continue life and Min CC (TIA Bortel)	32
Functionality under WinCC (TIA Portal)	Van
Libraries Applications/options	Yes
Applications/options • Web browser	Vac
Veb browser Pocket Word	Yes 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	Yes
 Number of bit messages 	4 000
 Analog messages 	Yes
 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 regines	300
Number of recipesData records per recipe	500
Entries per data record	1 000
Size of internal recipe memory Decipe memory expandable	2 Mbyte
Recipe memory expandable Variables	Yes
Number of variables per device	2 048
Number of variables per acvice Number of variables per screen	400
Limit values	Yes
Multiplexing	Yes
Structures	Yes
Arrays	Yes
Images	100
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
Image objects	
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
Complex image objects	
 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 Madia Player	Yes
Media Player Management	Yes
HTML browser PDF display	Yes
PDF display ID compare display	Yes
IP camera display Par graphs	Yes
Bar graphs Sliders	Yes
SlidersPointer instruments	Yes Yes
Analog/digital clock	Yes
Lists	
Number of text lists per project	500
Number of text lists per project Number of entries per text list	500
Number of graphics lists per project	500
Number of graphics lists per project Number of entries per graphics list	500
Archiving Archiving	
Number of archives per device	50
Number of entries per archive	20 000
Message archive	Yes
Process value archive	Yes

 Archiving methods 	
 Sequential archive 	Yes
— Short-term archive	Yes
 Memory location 	
— Memory card	Yes
— USB memory	Yes
— Ethernet	Yes
Data storage format	
— CSV	Yes
— TXT	Yes
— RDB	Yes
Security	
Number of user groups	50
Number of user rights	32
Number of users	50
Password export/import	Yes
SIMATIC Logon	Yes
Logging through printer	V
• Alarms	Yes
Report (shift log)	Yes
Hardcopy	Yes
Electronic print to file	Yes; PDF, HTML
Character sets	
 Keyboard fonts 	
— US English	Yes
Transfer (upload/download)	
 MPI/PROFIBUS DP 	Yes
• USB	Yes
Ethernet	Yes
 using external storage medium 	Yes
Process coupling	
• S7-1200	Yes
• S7-1500	Yes
• S7-200	Yes
• S7-300/400	Yes
• LOGO!	Yes
• WinAC	Yes
• SINUMERIK	Yes; with SINUMERIK option package
• SIMOTION	Yes
Allen Bradley (EtherNet/IP)	Yes
Allen Bradley (DF1)	Yes
Mitsubishi (MC TCP/IP) Mitsubishi (FY)	Yes
Mitsubishi (FX) OMPON (FING TOP)	Yes
OMRON (FINS TCP) OMBON (FINS TCP)	No
OMRON (LINK/Multilink)	Yes
 Modicon (Modbus TCP/IP) 	Yes
Modicon (Modbus)	Yes
OPC UA Client	Yes
OPC UA Server	Yes
Service tools/configuration aids	
 Backup/Restore manually 	Yes
 Backup/Restore automatically 	Yes
Simulation	Yes
Device switchover	Yes
Peripherals/Options	
Printer	Yes
SIMATIC HMI MM memory card: Multi Media Card	Yes; Up to 128 MB
SIMATIC HIM HIM HIE HOLY Card. Multi Media Card SIMATIC HIM SD memory card: Secure Digital memory	Yes; Up to 2 GB
card	1 63, Ομ 10 2 Ου
SIMATIC HMI CF memory card Compact Flash Card	No
Similar in the momenty out a compact hash out	.,,

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
Mechanics/material	
Enclosure material (front)	
Plastic	No
Aluminum	Yes
 Stainless steel 	No
Dimensions	
Width of the housing front	454 mm
Height of housing front	289 mm
Mounting cutout, width	434 mm
Mounting cutout, height	269 mm
Overall depth	65 mm
Weights	
Weight (without packaging)	4.4 kg
Weight (with packaging)	5.7 kg

last modified: 5/27/2022 **C**