SIEMENS

Data sheet

SIMATIC HMI TP1500 Comfort Pro, for support arm (not expandable, flange on top), Comfort Panel, touch operation, 15" widescreen TFT display, 16 million colors, PROFINET interface, MPI/PROFIBUS DP interface, 24 MB configuration memory, WEC 2013, configurable from WinCC Comfort V14 SP1 with HSP



General information	
Product type designation	TP1500 Comfort PRO
Display	
Design of display	TFT
Screen diagonal	15.6 in
Display width	344.2 mm
Display height	193.5 mm
Number of colors	16 777 216
Resolution (pixels)	
Horizontal image resolution	1 366 pixel
 Vertical image resolution 	768 pixel
Backlighting	
 MTBF backlighting (at 25 °C) 	50 000 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; Projective-capacitive
Expansions for operator control of the process	
 Direct keys (touch buttons as S7 input I/O) 	40
Installation type/mounting	
Mounting	Support arm
Mounting position	vertical
Mounting in portrait format possible	No
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
Input current	
Current consumption (rated value)	1.5 A
Starting current inrush I²t	0.5 A ² ·s
Power	
Active power input, typ.	36 W
1 1 1	30 W
Processor	
Processor type	X86
Memory	
Flash	Yes
RAM	Yes
Memory available for user data	24 Mbyte
Type of output	
Info LED	No
Power LED	No
Error LED	No
Acoustics	
Buzzer	No
• Speaker	Yes
Time of day	
Clock	
	V
Hardware clock (real-time)	Yes
Software clock	Yes
• retentive	Yes; Back-up duration typically 6 weeks
synchronizable	Yes
Interfaces	
Number of industrial Ethernet interfaces	2; 2 ports (switch) + independent port
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
Number of SD card slots	2
With software interfaces	No
Industrial Ethernet	
Industrial Ethernet status LED	3
 Number of ports of the integrated switch 	2
Protocols	
PROFINET	Yes
Supports protocol for PROFINET IO	Yes
IRT	Yes
PROFIBUS	Yes
EtherNet/IP	Yes
MPI	Yes
Protocols (Ethernet)	165
	Vee
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
WEB characteristics	
• HTTP	Yes
• HTTPS	Yes
• HTML	Yes
• XML	Yes
• CSS	Yes
 Active X 	Yes
 JavaScript 	Yes

• Java VM	No
Redundancy mode	110
Media redundancy	
— MRP	Yes
Further protocols	165
• CAN	No
MODBUS	Yes
	165
Interrupts/diagnostics/status information	
Diagnoses	Vest C7 controller
Diagnostic information readable	Yes; S7 controller
EMC	
Emission of radio interference acc. to EN 55 011	V
Limit class A, for use in industrial areas Limit class B, for use in residential areas	Yes
Limit class B, for use in residential areas	No
Degree and class of protection	
IP (at the front)	IP65
IP (rear)	IP65
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	No; Available soon
EAC (formerly Gost-R)	No; Available soon
Ambient conditions	
Suited for indoor use	Yes
Suited for outdoor use	No
Ambient temperature during operation	
Operation (vertical installation)	
 For vertical installation, min. 	0°C
For vertical installation, max.	45 °C
Operation (max. tilt angle)	
 At maximum tilt angle, min. 	0°C
— At maximum tilt angle, min.	40 °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; Windows Embedded Compact 2013
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

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Libraries		32
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SIMATIC WINCC Audit		
Number of Visual Basic Scripts		
Task planner		
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 Global image Pop-up images Slide-in images Image selection by PLC Yes 		
 Pop-up images Slide-in images Image selection by PLC Yes Yes 		
 Slide-in images Image selection by PLC Yes 		
• Image selection by PLC Yes		
Image number in the PLC Yes		
	Image number in the PLC	Yes

Image objects	
Number of objects per image	600
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	40
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
Lists	
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
Archiving	
Number of archives per device	50
Number of entries per archive	50 000
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

Alamaa	Ves
• 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	N.
• \$7-1200	Yes
• S7-1500	Yes
• S7-200	Yes
• S7-300/400	Yes
• LOGO!	Yes
• WinAC	Yes
• SINUMERIK	Yes; With SINUMERIK option package as from WinCC V15 or higher
• SIMOTION	Yes
Allen Bradley (EtherNet/IP)	Yes
Allen Bradley (DF1)	Yes
 Mitsubishi (MC TCP/IP) 	Yes
Mitsubishi (FX)	Yes
OMRON (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 HMI SD memory card: Secure Digital memory	Yes; Up to 2 GB
card	
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
Mechanics/material	
Enclosure material (front)	
Plastic	No
 Aluminum 	Yes
Stainless steel	No
Dimensions	
Width of the housing front	396 mm
Height of housing front	256 mm; Without basic adapter
Overall depth	101 mm; Without basic adapter
Weights	
Weight (without packaging)	6.3 kg
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