

SIMATIC HMI TP1500 BASIC COLOR PN, BASIC PANEL, TOUCH OPERATION, 15" TFT DISPLAY, 256 COLORS, PROFINET INTERFACE, CONFIGURATION FROM WINCC FLEXIBLE 2008 SP2 COMPACT/ WINCC BASIC V10.5/ STEP7 BASIC V10.5, CONTAINS OPEN SOURCE SW WHICH IS PROVIDED FREE OF CHARGE FOR DETAILS SEE CD



Product type designation	
<b>Display</b>	
Design of display	TFT
Screen diagonal	15 in
Display width	304.1 mm
Display height	228.1 mm
Number of colors	256
<b>Resolution (pixels)</b>	
• Horizontal image resolution	1 024
• Vertical image resolution	768
<b>Backlighting</b>	
• MTBF backlighting (at 25 °C)	50 000 h
• Dimmable backlight	No
<b>Control elements</b>	
<b>Keyboard</b>	
• Function keys	
— Number of function keys	0
• Keys with LED	No
• System keys	No
• Numeric/alphabetical input	
— Numeric keyboard	Yes; Onscreen keyboard
— Alphanumeric keyboard	Yes; Onscreen keyboard
<b>Touch operation</b>	
• Design as touch screen	Yes

Installation type/mounting	
Mounting in portrait format possible	No
Mounting in landscape format possible	Yes
Mounting position	vertical
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)	0.8 A
Starting current inrush I <sup>2</sup> t	0.2 A <sup>2</sup> ·s
Power	
Power consumption, typ.	20 W
Processor	
Processor type	RISC 32-bit
Memory	
Flash	Yes
RAM	Yes
Usable memory for user data	2 Mbyte
Type of output	
Acoustics	
• Buzzer	Yes
• Speaker	No
Time of day	
Clock	
• Hardware clock (real-time clock)	No
• Software clock	Yes
• Battery-backed	No
• Synchronizable	Yes
Interfaces	
Number of RS 485 interfaces	0
Number of USB interfaces	0
Number of 20 mA interfaces (TTY)	0
Number of RS 232 interfaces	0
Number of RS 422 interfaces	0
Number of parallel interfaces	0
Number of other interfaces	0

Number of SD card slots	0
With software interfaces	No
<b>Industrial Ethernet</b>	
• Number of industrial Ethernet interfaces	1
• Industrial Ethernet status LED	2
<b>Protocols</b>	
PROFINET	Yes
PROFINET IO	No
IRT	No
PROFIBUS	No
MPI	No
<b>Protocols (Ethernet)</b>	
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
<b>WEB characteristics</b>	
• HTTP	No
• HTML	No
<b>Further protocols</b>	
• CAN	No
• MODBUS	Yes; Modicon (MODBUS TCP/IP)
• Supports protocol for EtherNet/IP	Yes
<b>Interrupts/diagnostics/status information</b>	
<b>Diagnostic messages</b>	
• Diagnostic information readable	No
<b>Degree and class of protection</b>	
IP (at the front)	IP65
Enclosure Type 4 at the front	Yes
Enclosure type 4x at the front	Yes
IP (rear)	IP20
<b>Standards, approvals, certificates</b>	
CE mark	Yes
KC approval	Yes
cULus	Yes
RCM (formerly C-TICK)	Yes
<b>Marine approval</b>	
• 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
• Nippon Kaiji Kyokai (Class NK)	No
• Polski Rejestr Statkow (PRS)	No
<b>Use in hazardous areas</b>	
• ATEX Zone 2	No
• ATEX Zone 22	No
• cULus Class I Zone 1	No
• cULus Class I Zone 2, Division 2	No
• FM Class I Division 2	No
<b>Ambient conditions</b>	
<b>Ambient temperature in operation</b>	
• Operation (vertical installation)	
— For vertical installation, min.	0 °C
— For vertical installation, max.	50 °C
• Operation (max. tilt angle)	
— At maximum tilt angle, min.	0 °C
— At maximum tilt angle, min.	40 °C
<b>Storage/transport temperature</b>	
• Min.	-20 °C
• max.	60 °C
<b>Relative humidity</b>	
• Operation, max.	90 %
<b>Operating systems</b>	
<b>Pre-installed operating system</b>	
• Windows CE	No
proprietary	Yes
<b>Configuration</b>	
Message indicator	Yes
Alarm logging system (incl. buffer and acknowledgment)	Yes
Process value display (output)	Yes
Process value default (input) possible	Yes
Recipe administration	Yes
<b>Configuration software</b>	
• STEP 7 Basic (TIA Portal)	Yes; via integrated WinCC Basic (TIA Portal)
• STEP 7 Professional (TIA Portal)	Yes; via integrated WinCC Basic (TIA Portal)
• WinCC flexible Compact	Yes
• WinCC flexible Standard	Yes
• WinCC flexible Advanced	Yes
• WinCC Basic (TIA Portal)	Yes

• WinCC Comfort (TIA Portal)	Yes
• WinCC Advanced (TIA Portal)	Yes
• WinCC Professional (TIA Portal)	Yes

## Languages

Online languages	
• Number of online/runtime languages	5
Languages	
• Languages per project	32
• Languages	
— D	Yes
— GB	Yes
— F	Yes
— I	Yes
— E	Yes
— Chinese traditional	Yes
— Chinese simplified	Yes
— DK	Yes
— FIN	Yes
— GR	Yes
— J	Yes
— KP / ROK	Yes
— NL	Yes
— N	Yes
— PL	Yes
— P	Yes
— RUS	Yes
— S	Yes
— CZ	Yes
— SK	Yes
— TR	Yes
— H	Yes

## Functionality under WinCC (TIA Portal)

Libraries	Yes
Task planner	
• time-controlled	No
• task-controlled	Yes
Message system	
• Number of alarm classes	32
• System messages HMI	Yes
• Number of characters per message	80
• Number of process values per message	8

• Message indicator	Yes
• Message buffer	
— Number of entries	256
— Circulating buffer	Yes
— retentive	Yes
— maintenance-free	Yes
<b>Recipe administration</b>	
• Number of recipes	5
• Data records per recipe	20
• Entries per data record	20
• Size of internal recipe memory	40 kbyte
• Recipe memory expandable	No
<b>Variables</b>	
• Number of variables per device	500
• Number of variables per screen	30
• Limit values	Yes
• Multiplexing	Yes
• Structs	No
• Arrays	Yes
<b>Images</b>	
• Number of configurable images	50
• Permanent window/default	Yes
• Global image	Yes
• Start screen configurable	Yes
• Image selection by PLC	Yes
• Image number in the PLC	Yes
<b>Image objects</b>	
• Number of objects per image	30
• 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 view	Yes
• Icons	Yes
• Geometric objects	Yes
<b>Complex image objects</b>	
• Number of complex objects per screen	5
• Alarm view	Yes

• Trend view	Yes
• User view	Yes
• Status/control	No
• Sm@rtClient view	No
• Recipe view	Yes
• f(x) trend view	No
• System diagnostics view	No
• Media Player	No
• Bar graphs	Yes
• Sliders	No
• Pointer instruments	No
• Analog/digital clock	No
<b>Lists</b>	
• Number of text lists per project	150
• Number of entries per text list	30
• Number of graphics lists per project	100
• Number of entries per graphics list	30
<b>Archiving</b>	
• Number of archives per device	0
<b>Security</b>	
• Number of user groups	50
• Number of user rights	32
• Number of users	50
• Password export/import	No
• SIMATIC Logon	No
<b>Character sets</b>	
• Keyboard	
— US American (English)	Yes
• Character sets	
— Tahoma	Yes
— Arial	No
— Courier New	No
— WinCC flexible Standard	Yes
— Ideographic languages	Yes
• Font size freely scalable	No
• Additional character sets can be loaded	No
<b>Transfer (upload/download)</b>	
• MPI/PROFIBUS DP	No
• USB	No
• Ethernet	Yes
• using external storage medium	No

Process coupling	
• S7-1200	Yes
• S7-1500	Yes
• S7-200	Yes
• S7-300/400	Yes
• LOGO!	Yes
• Win AC	Yes
• SINUMERIK	No
• SIMOTION	No
• Allen Bradley (EtherNet/IP)	Yes
• Allen Bradley (DF1)	No
• Mitsubishi (MC TCP/IP)	Yes
• Mitsubishi (FX)	No
• OMRON (FINS TCP)	No
• OMRON (LINK/Multilink)	No
• Modicon (Modbus TCP/IP)	Yes
• Modicon (Modbus)	Yes
Service tools/configuration aids	
• Clean screen	Yes
• Touch calibration	Yes
• Backup/restore	Yes
• Backup/Restore automatically	No
• Simulation	Yes
• Device switchover	Yes
• Delta transfer	No
I/O / Options	
I/O devices	
• Printer	No
• MultiMediaCard	No
• SD card	No
• USB memory	No
Mechanics/material	
Type of housing (front)	
• plastic	Yes
• aluminum	No
• Stainless steel	No
Dimensions	
Width of the housing front	400 mm
Height of housing front	310 mm
Mounting cutout, width	367 mm



Mounting cutout, height	289 mm
Device depth	60 mm
<b>Weights</b>	
Without packaging	4.2 kg
With packaging	4.68 kg
<b>last modified:</b>	12.03.2015