



SIMATIC HMI, KTP400 BASIC, BASIC PANEL,  
 KEY AND TOUCH OPERATION,  
 4" TFT DISPLAY, 65536 COLORS,  
 PROFINET INTERFACE,  
 CONFIGURATION FROM WINCC BASIC V13/ STEP7  
 BASIC V13,  
 CONTAINS OPEN SOURCE SW WHICH IS PROVIDED  
 FREE OF CHARGE FOR DETAILS SEE CD

Display	
Design of display	TFT widescreen display, LED backlighting
Screen diagonal	4.3 in
Display width	95 mm
Display height	53.9 mm
Number of colors	65536
Resolution (pixels)	
Horizontal image resolution	480
Vertical image resolution	272
Backlighting	
MTBF backlighting (at 25 °C)	20000 h
Dimmable backlight	Yes
Control elements	
Keyboard fonts	
Number of function keys	4
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
<b>Installation type/mounting</b>	
Mounting in portrait format possible	Yes
Mounting in landscape format possible	Yes
<b>Supply voltage</b>	
Type of supply voltage	24 V 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)	125 mA
Inrush current A <sup>2</sup> s	0.2 A <sup>2</sup> s
<b>Power</b>	
Power consumption, typ.	3 W
<b>Processor</b>	
Processor type	
X86	No
ARM	Yes
<b>Memory</b>	
Flash	Yes
RAM	Yes
Usable memory for user data	10 Mbyte
<b>Type of output</b>	
Acoustics	
Buzzer	Yes
Speaker	No
<b>Time of day</b>	
<b>Clock</b>	
Hardware clock (real-time clock)	Yes
Software clock	Yes
Battery-backed	Yes
Synchronizable	Yes
<b>Interfaces</b>	
Number of RS 485 interfaces	0
Number of USB interfaces	1
Number of SD card slots	0

<b>Number of parallel interfaces</b>	0
<b>Number of 20 mA interfaces (TTY)</b>	0
<b>Number of RS 232 interfaces</b>	0
<b>Number of RS 422 interfaces</b>	0
<b>Number of other interfaces</b>	0
<b>With software interfaces</b>	No
<b>Industrial Ethernet</b>	
<b>Number of industrial Ethernet interfaces</b>	1
<b>Industrial Ethernet status LED</b>	2
<b>Protocols</b>	
<b>PROFINET</b>	Yes
<b>Supports protocol for PROFINET IO</b>	No
<b>IRT supported</b>	No
<b>PROFIBUS</b>	No
<b>MPI</b>	No
<b>Protocols (Ethernet)</b>	
<b>TCP/IP</b>	Yes
<b>DHCP</b>	Yes
<b>SNMP</b>	Yes
<b>DCP</b>	Yes
<b>LLDP</b>	Yes
<b>WEB characteristics</b>	
<b>HTTP</b>	No
<b>HTML</b>	No
<b>Further protocols</b>	
<b>CAN</b>	No
<b>MODBUS</b>	Yes ; Modicon (MODBUS TCP/IP)
<b>Supports protocol for EtherNet/IP</b>	Yes
<b>Interrupts/diagnostics/status information</b>	
<b>Diagnostic messages</b>	
<b>Diagnostic information readable</b>	No
<b>EMC</b>	
<b>Emission of radio interference acc. to EN 55 011</b>	
<b>Emission of radio interferences acc. to EN 55 011 (limit class A)</b>	Yes
<b>Emission of radio interference acc. to EN 55 011 (limit class B)</b>	No
<b>Degree and class of protection</b>	
<b>IP (at the front)</b>	65

<b>Enclosure Type 4 at the front</b>	Yes
<b>Enclosure type 4x at the front</b>	Yes
<b>IP (rear)</b>	20
<b>Standards, approvals, certificates</b>	
<b>CE mark</b>	Yes
<b>KC approval</b>	Yes
<b>cULus</b>	Yes
<b>RCM (former C-TICK)</b>	Yes
<b>Use in hazardous areas</b>	
<b>ATEX Zone 2</b>	No
<b>ATEX Zone 22</b>	No
<b>cULus Class I Zone 1</b>	No
<b>cULus Class I Zone 2, Division 2</b>	No
<b>FM Class I Division 2</b>	No
<b>Ambient conditions</b>	
<b>maximum permissible angle of inclination without external ventilation</b>	35 °
<b>Operating temperature</b>	
<b>Operation (vertical installation)</b>	
<b>in vertical mounting position, minimum</b>	0 °C
<b>in vertical mounting position, maximum</b>	50 °C
<b>Operation (max. tilt angle)</b>	
<b>at maximum tilt angle, minimum</b>	0 °C
<b>at maximum tilt angle, maximum</b>	40 °C
<b>Operation (vertical installation, portrait format)</b>	
<b>in vertical mounting position, minimum</b>	0 °C
<b>in vertical mounting position, maximum</b>	40 °C
<b>Operation (max. tilt angle, portrait format)</b>	
<b>at maximum tilt angle, minimum</b>	0 °C
<b>at maximum tilt angle, maximum</b>	35 °C
<b>Storage/transport temperature</b>	
<b>Min.</b>	-20 °C
<b>max.</b>	60 °C
<b>Relative humidity</b>	
<b>max. relative humidity</b>	90 %
<b>Operating systems</b>	
<b>Windows CE</b>	No
<b>proprietary</b>	Yes
<b>Executable with configuration operating system</b>	

other	No
<b>Configuration</b>	
Message indicator	Yes
With 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	No
WinCC flexible Standard	No
WinCC flexible Advanced	No
WinCC Basic (TIA Portal)	Yes
WinCC Comfort (TIA Portal)	Yes
WinCC Advanced (TIA Portal)	Yes
WinCC Professional (TIA Portal)	Yes
<b>Languages</b>	
<b>Online languages</b>	
Number of online/runtime languages	10
<b>Languages</b>	
Languages per project	32
<b>Languages</b>	
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

<b>RUS</b>	Yes
<b>S</b>	Yes
<b>CZ</b>	Yes
<b>TR</b>	Yes
<b>H</b>	Yes
<b>Functionality under WinCC (TIA Portal)</b>	
<b>Libraries</b>	Yes
<b>Number of Visual Basic Scripts</b>	No
<b>Task planner</b>	Yes
<b>time-controlled</b>	No
<b>task-controlled</b>	Yes
<b>Help system</b>	Yes
<b>Number of characters per info text</b>	500
<b>Message system</b>	
<b>Number of alarm classes</b>	32
<b>Number of bit messages</b>	1000
<b>Number of analog messages</b>	25
<b>S7 alarm number procedure</b>	No
<b>System messages HMI</b>	Yes
<b>System messages, other (SIMATIC S7, Sinumerik, Simotion, etc.)</b>	Yes ; System message buffer of the SIMATIC S7-1200 and S7-1500
<b>Number of characters per message</b>	80
<b>Number of process values per message</b>	8
<b>Acknowledgment groups</b>	Yes
<b>Message indicator</b>	Yes
<b>Message buffer</b>	Yes
<b>Number of entries</b>	256
<b>Circulating buffer</b>	Yes
<b>retentive</b>	Yes
<b>maintenance-free</b>	Yes
<b>Recipe administration</b>	
<b>Number of recipes</b>	50
<b>Data records per recipe</b>	100
<b>Entries per data record</b>	100
<b>Size of internal recipe memory</b>	256 kbyte
<b>Recipe memory expandable</b>	No
<b>Variables</b>	
<b>Number of variables per device</b>	800
<b>Number of variables per screen</b>	100

<b>Limit values</b>	Yes
<b>Multiplexing</b>	Yes
<b>Structs</b>	No
<b>Arrays</b>	Yes
<b>Images</b>	
<b>Number of configurable images</b>	250
<b>Permanent window/default</b>	Yes
<b>Global image</b>	Yes
<b>Start screen configurable</b>	Yes
<b>Image selection by PLC</b>	Yes
<b>Image number in the PLC</b>	Yes
<b>Image objects</b>	
<b>Number of objects per image</b>	100
<b>Text fields</b>	Yes
<b>I/O fields</b>	Yes
<b>Graphic I/O fields (graphics list)</b>	Yes
<b>Symbolic I/O fields (text list)</b>	Yes
<b>Date/time fields</b>	Yes
<b>Switch</b>	Yes
<b>Buttons</b>	Yes
<b>Graphic view</b>	Yes
<b>Icons</b>	Yes
<b>Geometric objects</b>	Yes
<b>Complex image objects</b>	
<b>Number of complex objects per screen</b>	10
<b>Alarm view</b>	Yes
<b>Trend view</b>	Yes
<b>User view</b>	Yes
<b>Status/control</b>	No
<b>Sm@rtClient view</b>	No
<b>Recipe view</b>	Yes
<b>f(x) trend view</b>	No
<b>System diagnostics view</b>	Yes ; System message buffer of the SIMATIC S7-1200 and S7-1500
<b>Media Player</b>	No
<b>Bar graphs</b>	Yes
<b>Sliders</b>	No
<b>Pointer instruments</b>	No
<b>Analog/digital clock</b>	No
<b>Lists</b>	

Number of text lists per project	150
Number of entries per text list	100
Number of graphics lists per project	100
Number of entries per graphics list	100
<b>Archiving</b>	
Number of archives per device	2
Number of entries per archive	10000
Message archive	Yes
Process value archive	Yes
<b>Archiving methods</b>	
Sequential archive	Yes
Short-term archive	Yes
<b>Memory location</b>	
Memory card	No
USB memory	Yes
Ethernet	No
<b>Data storage format</b>	
CSV	No
TXT	Yes
RDB	No
<b>Security</b>	
Number of user groups	50
Number of user rights	32
Number of users	50
Password export/import	Yes ; Possible via ProSave
SIMATIC Logon	No
<b>Character sets</b>	
<b>Keyboard fonts</b>	
US English	Yes
<b>Character sets</b>	
Tahoma	Yes
Arial	No
Courier New	No
WinCC flexible Standard	Yes
Ideographic languages	Yes
Font size freely scalable	Yes
<b>Transfer (upload/download)</b>	
MPI/PROFIBUS DP	No
USB	No



Ethernet	Yes
using external storage medium	No
<b>Process coupling</b>	
S7-1200	Yes
S7-1500	Yes
S7-200	Yes
S7-300/400	Yes
LOGO!	Yes
Win AC	Yes
SINUMERIK	No
SIMOTION	Yes
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)	No
<b>Service tools/configuration aids</b>	
Clean screen	Yes
Touch calibration	Yes
Backup/restore	Yes ; Possible via ProSave
Backup/Restore automatically	No
Simulation	Yes
Device switchover	Yes
Delta transfer	No
<b>I/O/Options</b>	
<b>I/O devices</b>	
Printer	No
Multi Media Card	No
SD card	No
USB memory	Yes
<b>Mechanics/material</b>	
<b>Type of housing (front)</b>	
Plastic	Yes
Aluminum	No
Stainless steel	No
<b>Dimensions</b>	

<b>Width of the housing front</b>	141 mm
<b>Height of housing front</b>	116 mm
<b>Mounting cutout/device depth (W x H x D)</b>	
<b>Mounting cutout, width</b>	123 mm
<b>Mounting cutout, height</b>	99 mm
<b>Device depth</b>	33 mm
<b>Weights</b>	
<b>Weight without packaging</b>	360 g
<b>Weight incl. packaging</b>	470 g
Status	Jun 9, 2014