

# SIEMENS

## Product data sheet

**6AV6647-0AC11-3AX0**


SIMATIC HMI KTP600 BASIC COLOR DP,  
 BASIC PANEL, KEY AND TOUCH OPERATION,  
 6" TFT DISPLAY, 256 COLORS,  
 MPI/PROFIBUS DP INTERFACE,  
 CONFIGURATION FROM WINCC FLEXIBLE 2008  
 SP2 COMPACT/ WINCC BASIC V11/ STEP7 BASIC  
 V11,  
 CONTAINS OPEN SOURCE SW WHICH IS  
 PROVIDED FREE OF CHARGE FOR DETAILS SEE  
 CD

Display	
Design of display	TFT
Screen diagonal	5.7 in
Display width	115.2 mm
Display height	86.4 mm
Number of colors	256
Resolution (pixels)	
Horizontal image resolution	320
Vertical image resolution	240
Backlighting	
MTBF backlighting (at 25 °C)	50000 h
Dimmable backlight	No
Control elements	
Keyboard fonts	
Number of function keys	6

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	DC
Rated voltage/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)	0.35 A
Inrush current A²s	0.5 A²·s
<b>Power</b>	
Power consumption, typ.	9 W
<b>Processor</b>	
Processor type	
X86	No
ARM	Yes ; RISC 32-bit
<b>Memory</b>	
Flash	Yes
RAM	Yes
Usable memory for user data	512 kbyte
<b>Type of output</b>	
Acoustics	
Buzzer	Yes
Speaker	No
<b>Time of day</b>	

Clock	
Hardware clock (real-time clock)	No
Software clock	Yes
Battery-backed	No
Synchronizable	Yes
Interfaces	
Number of RS 485 interfaces	1
Number of USB interfaces	0
Number of SD card slots	0
Number of parallel interfaces	0
Number of 20 mA interfaces (TTY)	0
Number of RS 232 interfaces	0
Number of RS 422 interfaces	1
Number of other interfaces	0
With software interfaces	No
Industrial Ethernet	
Number of industrial Ethernet interfaces	0
Industrial Ethernet status LED	0
Protocols	
PROFINET	No
Supports protocol for PROFINET IO	No
IRT supported	No
PROFIBUS	Yes
MPI	Yes
Protocols (Ethernet)	
TCP/IP	No
DHCP	No
SNMP	No
DCP	No
LLDP	No
WEB characteristics	
HTTP	No
HTML	No

Further protocols	
CAN	No
MODBUS	Yes ; Modicon (MODBUS RTU)
Supports protocol for EtherNet/IP	No
Interrupts/diagnostics/status information	
Diagnostic messages	
Diagnostic information readable	No
Degree and class of protection	
Type of protection	IP20
IP (at the front)	IP65
Enclosure Type 4 at the front	Yes
Enclosure type 4x at the front	Yes
Standards, approvals, certificates	
CE	Yes
KC approval	Yes
cULus	Yes
C-TICK	Yes
GL	Yes
ABS	Yes
BV	Yes
DNV	Yes
LRS	Yes
Class NK	Yes
PRS	No
Use in hazardous areas	
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
Ambient conditions	
Mounting position	vertical
maximum permissible angle of inclination without external ventilation	35°

Operating temperature	
Operation (vertical installation)	
in vertical mounting position/ minimum	0 °C
in vertical mounting position/ maximum	50 °C
Operation (max. tilt angle)	
at maximum tilt angle/minimum	0 °C
at maximum tilt angle/maximum	40 °C
Operation (vertical installation, portrait format)	
in vertical mounting position/ minimum	0 °C
in vertical mounting position/ maximum	50 °C
Operation (max. tilt angle, portrait format)	
at maximum tilt angle/minimum	0 °C
at maximum tilt angle/maximum	40 °C
Storage/transport temperature	
Min.	-20 °C
max.	60 °C
Relative humidity	
max. relative humidity	90 %
Operating systems	
Windows CE	No
proprietary	Yes
other	No
Configuration	
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
Configuration software	
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
<b>Languages</b>	
<b>Online languages</b>	
Number of online/runtime languages	5
<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
RUS	Yes
S	Yes
CZ	Yes
SK	Yes
TR	Yes
H	Yes

Functionality under WinCC flexible	
Libraries	Yes
Number of Visual Basic Scripts	Not possible
Number	0
Task planner	
time-controlled	No
task-controlled	Yes
Help system	
Number of characters per info text	320
With alarm logging system (incl. buffer and acknowledgment)	
Number of alarm classes	32
Number of bit messages	200
Number of analog messages	15
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
Recipes	
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
Variables	
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
Switch	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 fonts	
US 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	Yes
USB	No
Ethernet	No
using external storage medium	No
<b>Process coupling</b>	

S7-1200	Yes
S7-200	Yes
S7-300/400	Yes
	Yes ; With restrictions with regard to address area and data types <a href="http://support.automation.siemens.com/WW/view/de/56348902">http://support.automation.siemens.com/WW/view/de/56348902</a>
Win AC	Yes
SINUMERIK	No
SIMOTION	No
Allen Bradley (EtherNet/IP)	No
Allen Bradley (DF1)	Yes
Mitsubishi (MC TCP/IP)	No
Mitsubishi (FX)	Yes
OMRON (FINS TCP)	No
OMRON (LINK/Multilink)	Yes
Modicon (Modbus TCP/IP)	No
Modicon (Modbus)	Yes
<b>Service tools/configuration aids</b>	
Clean screen	Yes
Touch calibration	Yes
Backup/restore	Yes
Backup/Restore automatically	No
Simulation	Yes
Device switchover	Yes
Delta transfer	No
<b>I/O / Options</b>	
I/O devices	
Printer	No
Multi Media Card	No
SD card	No
USB memory	No
<b>Mechanics/material</b>	
Type of housing (front)	

Plastic	Yes
Aluminum	No
Stainless steel	No
<b>Dimensions</b>	
Width of the housing front	214 mm
Height of housing front	158 mm
Depth/installation dimension	44 mm
Mounting cutout, width	197 mm
Mounting cutout, height	141 mm
<b>Weight</b>	
Weight without packaging	1.07 kg
Weight incl. packaging	1.35 kg
Status	Jul 26, 2012