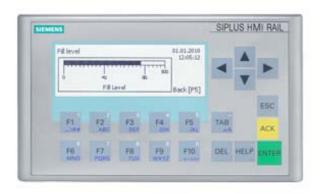
## **SIEMENS**

## Data sheet

6AG2647-0AH11-1AX0

SIPLUS HMI KP300 BASIC MONO 3,6" T1 RAIL -25 ... +55
DEGREE C +70 DEGREE C FOR 10 MIN WITH CONFORMAL
COATING BASEDON: 6AV6647-0AH11-3AX0 . BASIC PANEL, KEY
OPERATION, 3" FSTN LCD DISPLAY, MONOCHROME
BLACK/WHITE, PROFINET INTERFACE, CONFIGURATION FROM
WINCC BASIC V11/ STEP7 BASIC V11, CONTAINS OPEN
SOURCE SW WHICH IS PROVIDED FREE OF CHARGE FOR
DETAILS SEE CD



General information		
Product type designation	SIPLUS HMI KP300 BASIC MONO 3.6" T1 RAIL	
Display		
Design of display	FSTN	
Screen diagonal	3.6 in	
Display width	87 mm	
Display height	31 mm	
Number of colors	4; Backlit display only (white, red, green, yellow)	
Resolution (pixels)		
<ul> <li>Horizontal image resolution</li> </ul>	240 Pixel	
<ul> <li>Vertical image resolution</li> </ul>	80 Pixel	
Backlighting		
<ul> <li>MTBF backlighting (at 25 °C)</li> </ul>	50 000 h	
Backlight dimmable	No	
Control elements		
Keyboard fonts		
<ul><li>Function keys</li></ul>		
<ul> <li>Number of function keys</li> </ul>	10	

<ul><li>Keys with LED</li></ul>	No
System keys	Yes
Numeric/alphabetical input	
<ul> <li>Numeric keyboard</li> </ul>	Yes; Keyboard
<ul> <li>alphanumeric keyboard</li> </ul>	Yes; Keyboard
Touch operation	
Design as touch screen	No
Installation type/mounting	
Mounting position	vertical
Mounting in portrait format possible	No
Mounting in landscape format possible	Yes
maximum permissible angle of inclination without	35°
external ventilation	
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)	0.1 A
Starting current inrush I²t	0.5 A <sup>2</sup> ·s
Power	
Power consumption, typ.	3 W
Memory	
Flash	Yes
RAM	Yes
Memory available for user data	1 Mbyte
Type of output	
Acoustics	
Buzzer	No
• Speaker	No
Time of day	
Clock	
Hardware clock (real-time)	No
Software clock	Yes
• retentive	No
• synchronizable	Yes
Interfaces	
Number of industrial Ethernet interfaces	1

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
Industrial Ethernet	
Industrial Ethernet status LED	2
Protocols	
PROFINET	Yes
Supports protocol for PROFINET IO	No
IRT	No
PROFIBUS	No
MPI	No
Protocols (Ethernet)	
• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes
WEB characteristics	
• HTTP	No
• HTML	No
Further protocols	
• CAN	No
• EtherNet/IP	Yes
• MODBUS	Yes; Modicon (MODBUS TCP/IP)
Interrupts/diagnostics/status information	
Diagnostic messages	
<ul> <li>Diagnostic information readable</li> </ul>	No
Isolation	
Isolation tested with	707 V DC (type test) and according to EN 50155 (routine test)
Degree and class of protection	
IP (at the front)	IP65
Enclosure Type 4 at the front	Yes
Enclosure Type 4x at the front	Yes
IP (rear)	IP20
Standards, approvals, certificates	

ailway application	
• EN 50121-3-2	Yes; EMC for rail vehicles
• EN 50121-4	Yes; EMC for signal and telecommunications systems
● EN 50124-1	Yes; Railway applications - overvoltage category OV2; pollution degree PD2; rated surge voltage UNi = 0.5 kV; UNm = 24 V DC
● EN 50125-1	Yes; Rail vehicles - see ambient conditions
● EN 50125-2	Yes; Stationary electrical equipment - see ambient conditions
• EN 50125-3	Yes; Signal and telecommunications systems - see ambient conditions; vibrations and shocks: Application point outside of tracks (1 m to 3 m away from track)
• EN 50155	Yes; Rail vehicles - temperature class T1, horizontal mounting position, salt spray Class ST2
● EN 61373	Yes; Rail vehicles - vibrations and shocks: Category 1 Class A/B
• Fire protection acc. to EN 45545-2	Yes; Rail vehicles - verification on request
nbient conditions	
mbient temperature during storage/transportation	
● min.	-20 °C
• max.	60 °C
xtended ambient conditions	
<ul> <li>relative to ambient temperature-atmospheric pressure-installation altitude</li> </ul>	Tmin Tmax at 1080 hPa 795 hPa (-1000 m +2000 m)
Relative humidity	
— With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
<ul> <li>against biologically active substances / conformity with EN 60721-3-3</li> </ul>	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna). The supplied connector covers must remain on the unused interfaces during operation!
<ul> <li>against biologically active substances/conformity with EN 60721-3-5</li> </ul>	Yes; Class 5B2 mold and fungal spores (excluding fauna). The supplied plug covers must remain in place over the unused interfaces during operation!
<ul> <li>against chemically active substances / conformity with EN 60721-3-3</li> </ul>	Yes; Class 3C4 (RH < 75%) incl. salt spray according to EN 60068-2-52 (degree of severity 3). The supplied connector cover must remain on the unused interfaces during operation!
<ul> <li>against chemically active</li> <li>substances/conformity with EN 60721-3-5</li> </ul>	Yes; Class 5C3 (RH < 75%) including salt spray according to EN 50155 (ST2). The supplied plug covers must remain in place over the unused interfaces during operation!
— against mechanically active substances /	Yes; Class 3S4 incl. sand, dust. The supplied connector covers must remain on the unused interfaces during operation!
conformity with EN 60721-3-3	
conformity with EN 60721-3-3  — against mechanically active substances/conformity with EN 60721-3-5	Yes; Class 5S3 including sand and dust. The supplied plug cover must remain in place over the unused interfaces during operation
— against mechanically active	

• Windows CE	No
Configuration	
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)	Yes; via integrated WinCC Basic (TIA Portal)
<ul> <li>STEP 7 Professional (TIA Portal)</li> </ul>	Yes; via integrated WinCC Basic (TIA Portal)
<ul> <li>WinCC flexible Compact</li> </ul>	No
<ul> <li>WinCC flexible Standard</li> </ul>	No
WinCC flexible Advanced	No
WinCC Basic (TIA Portal)	Yes
WinCC Comfort (TIA Portal)	Yes
<ul> <li>WinCC Advanced (TIA Portal)</li> </ul>	Yes
• WinCC Professional (TIA Portal)	Yes
Languages	
Online languages	
<ul> <li>Number of online/runtime languages</li> </ul>	5
Project languages	
Languages per project	32
Functionality under WinCC (TIA Portal)	
Libraries	Yes
Task planner	
• time-controlled	No
• task-controlled	Yes
Help system	Yes
<ul> <li>Number of characters per info text</li> </ul>	320
Message system	
Number of alarm classes	32
Bit messages	
<ul> <li>Number of bit messages</li> </ul>	200
<ul> <li>Analog messages</li> </ul>	
<ul> <li>Number of analog messages</li> </ul>	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
Recipe management	
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	250
<ul> <li>Number of variables per screen</li> </ul>	30
Limit values	Yes
<ul> <li>Multiplexing</li> </ul>	Yes
• Structures	No
• Arrays	Yes
Images	
<ul> <li>Number of configurable images</li> </ul>	50
<ul><li>Permanent window/default</li></ul>	Yes
Global image	Yes
<ul><li>Image selection by PLC</li></ul>	Yes
<ul><li>Image number in the PLC</li></ul>	Yes
Image objects	
<ul><li>Number of objects per image</li></ul>	30
<ul><li>Text fields</li></ul>	Yes
• I/O fields	Yes
<ul> <li>Graphic I/O fields (graphics list)</li> </ul>	Yes
<ul> <li>Symbolic I/O fields (text list)</li> </ul>	Yes
Date/time fields	Yes
<ul><li>Switches</li></ul>	Yes
Buttons	Yes
Graphic display	Yes
• Icons	Yes
Geometric objects	Yes
Complex image objects	
<ul> <li>Number of complex objects per screen</li> </ul>	5
Alarm view	Yes
• Trend view	Yes
• User view	Yes
Status/control	No
<ul><li>Sm@rtClient view</li></ul>	No

• Recipe view	Yes
• f(x) trend view	No
<ul> <li>System diagnostics view</li> </ul>	No
Media Player	No
Bar graphs	Yes
• Sliders	No
Pointer instruments	No
Analog/digital clock	No
Lists	
Number of text lists per project	150
<ul> <li>Number of entries per text list</li> </ul>	30
<ul> <li>Number of graphics lists per project</li> </ul>	100
<ul> <li>Number of entries per graphics list</li> </ul>	30
Archiving	
Number of archives per device	0
Security	
Number of user groups	50
Number of user rights	32
Number of users	50
<ul> <li>Password export/import</li> </ul>	No
SIMATIC Logon	No
Character sets	
Keyboard fonts	
— US English	Yes
Transfer (upload/download)	
MPI/PROFIBUS DP	No
• USB	No
• Ethernet	Yes
<ul> <li>using external storage medium</li> </ul>	No
Process coupling	
• S7-1200	Yes
• S7-1500	Yes
• S7-200	Yes
• S7-300/400	Yes
• LOGO!	Yes
• WinAC	Yes
• SINUMERIK	
SINUMERIK	No
• SIMOTION	No No
• SIMOTION	No

<ul><li>Mitsubishi (FX)</li></ul>	No
• OMRON (FINS TCP)	No
OMRON (LINK/Multilink)	No
<ul><li>Modicon (Modbus TCP/IP)</li></ul>	Yes
Modicon (Modbus)	No
Service tools/configuration aids	
Backup/Restore manually	Yes
Backup/Restore automatically	No
Simulation	Yes
Device switchover	Yes
Peripherals/Options	
Peripherals	
Printer	No
<ul> <li>SIMATIC HMI MM memory card: Multi Media Card</li> </ul>	No
SIMATIC HMI SD memory card: Secure Digital	No
memory card	
• USB memory	No
Mechanics/material	
Enclosure material (front)	
Plastic	Yes
Aluminum	No
Stainless steel	No
Dimensions	
Width of the housing front	165 mm
Height of housing front	97 mm
Mounting cutout, width	149 mm
Mounting cutout, height	82 mm
Overall depth	30 mm
Weights	
Weight without packaging	0.25 kg
Weight incl. packaging	0.38 kg
Other	
Note:	For use in railway applications, also observe the product information "SIPLUS extreme RAIL" A5E37661960A Online Support article 109736776
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