

## Operator panels

Basic HMI

Basic Panels

### Standard devices 2nd Generation

#### Overview



#### Basic Panels (2<sup>nd</sup> Generation)

With their fully developed HMI basic functions, 2<sup>nd</sup> Generation SIMATIC HMI Basic Panels are the ideal entry-level series for simple HMI applications.

The device family offers panels with 4", 7", 9" and 12" displays, as well as combined key and touch operation.

The innovative high-resolution widescreen displays with 64 000 colors are also suitable for upright installation, and they can be dimmed down to 100%. The innovative operator interface with improved usability opens up a diverse range of options thanks to new controls and graphics.

The new USB interface enables the connection of keyboard, mouse or barcode scanner, and supports the simple archiving of data on a USB flash drive as well as the manual backup and restoring of the complete panel.

The integrated Ethernet or RS 485/422 interface (version-specific) enables simple connection to the controller.

<http://www.siemens.com/basic-panels>

#### Ordering data

#### Article No.

##### *SIMATIC HMI Basic Panels (2<sup>nd</sup> Generation)*

##### *Key and touch devices*

##### **SIMATIC HMI KTP400 Basic**

**6AV2123-2DB03-0AX0**

Key/touch operation;  
4" TFT widescreen display,  
65 536 colors, PROFINET interface

##### **SIMATIC HMI TP400 Basic Keyless**

**6AV2143-6DB00-0AA0**

Touch screen operation;  
4" TFT widescreen display,  
65 536 colors, PROFINET interface

##### **SIMATIC HMI KTP700 Basic**

**6AV2123-2GB03-0AX0**

Key/touch operation;  
7" TFT display, 65 536 colors,  
PROFINET interface

##### **SIMATIC HMI KTP700 Basic DP**

**6AV2123-2GA03-0AX0**

Key/touch operation;  
7" TFT display, 65 536 colors,  
PROFIBUS interface

##### **SIMATIC HMI TP700 Basic Keyless**

**6AV2143-6GB00-0AA0**

Touch operation;  
7" TFT display, 65 536 colors,  
PROFINET interface

##### **SIMATIC HMI KTP900 Basic**

**6AV2123-2JB03-0AX0**

Key/touch operation;  
9" TFT display, 65 536 colors,  
PROFINET interface

##### **SIMATIC HMI TP900 Basic Keyless**

**6AV2143-6JB00-0AA0**

Touch operation;  
9" TFT display, 65 536 colors,  
PROFINET interface

##### **SIMATIC HMI KTP1200 Basic**

**6AV2123-2MB03-0AX0**

Key/touch operation;  
12" TFT display, 65 536 colors,  
PROFINET interface

##### **SIMATIC HMI KTP1200 Basic DP**

**6AV2123-2MA03-0AX0**

Key/touch operation;  
12" TFT display, 65 536 colors,  
PROFIBUS interface

##### *Starter kits*

##### **Starter kit LOGO! + KP300 Basic mono PN**

**6AV2132-0HA00-0AA1**

##### **Starter kit LOGO! + KTP400 Basic**

**6AV2132-0KA00-0AA1**

##### **Starter kit LOGO! + KTP700 Basic**

**6AV2132-3GB00-0AA1**

Starter kits with a LOGO! consist of:

- the respective SIMATIC HMI Basic Panel
- SIMATIC HMI KP300 Basic mono PN
- SIMATIC HMI KTP400 Basic
- SIMATIC HMI KTP700 Basic
- LOGO! 12/24 RCE
- LOGO! POWER 24 V 1,3 A
- LOGO! SOFT COMFORT V7
- WINCC BASIC (TIA Portal)
- Ethernet CAT5 cable, 2 m

##### *Documentation*

Additional information on the Equipment Manual for the Basic Panels is available on the Internet at:

<http://support.automation.siemens.com>

##### *Accessories*

See "SIMATIC HMI operator control and monitoring systems" -> "Accessories"

## Technical specifications

Article number	6AV2123-2DB03-0AX0	6AV2143-6DB00-0AA0	6AV2123-2GB03-0AX0	6AV2123-2GA03-0AX0	6AV2143-6GB00-0AA0
	SIMATIC HMI KTP400 Basic	SIMATIC HMI TP400 Basic OEM	SIMATIC HMI KTP700 Basic	SIMATIC HMI KTP700 Basic DP	SIMATIC HMI TP700 Basic OEM
<b>General information</b>					
Product type designation	KTP400 Basic color PN	TP400 Basic Keyless	KTP700 Basic color PN	KTP700 Basic color DP	TP700 Basic Keyless
<b>Display</b>					
Design of display	TFT widescreen display, LED backlighting	TFT widescreen display, LED backlighting	TFT widescreen display, LED backlighting	TFT widescreen display, LED backlighting	TFT widescreen display, LED backlighting
Screen diagonal	4.3 in	4.3 in	7 in	7 in	7 in
Number of colors	65 536	65 536	65 536	65 536	65 536
<b>Resolution (pixels)</b>					
• Horizontal image resolution	480 pixel	480 pixel	800 pixel	800 pixel	800 pixel
• Vertical image resolution	272 pixel	272 pixel	480 pixel	480 pixel	480 pixel
<b>Backlighting</b>					
• MTBF backlighting (at 25 °C)	20 000 h	20 000 h	20 000 h	20 000 h	20 000 h
<b>Control elements</b>					
<b>Keyboard fonts</b>					
• Function keys		No			No
- Number of function keys	4	0	8	8	
<b>Touch operation</b>					
• Design as touch screen	Yes	Yes	Yes	Yes	Yes
• Design as multi-touch screen		No			
• Monitor keyboard		Yes			
<b>Installation type/mounting</b>					
Wall mounting/direct mounting	No	No	No		
Mounting in portrait format possible	Yes	Yes	Yes	Yes	Yes
<b>Supply voltage</b>					
Rated value (DC)	24 V	24 V	24 V	24 V	24 V
<b>Memory</b>					
Memory available for user data	10 Mbyte	10 Mbyte	10 Mbyte	10 Mbyte	10 Mbyte
<b>Type of output</b>					
Acoustics					
• Buzzer	Yes	Yes	Yes	Yes	Yes
<b>Time of day</b>					
<b>Clock</b>					
• Software clock	Yes	Yes	Yes	Yes	Yes
• retentive	Yes; Back-up duration typically 6 weeks	Yes	Yes; Back-up duration typically 6 weeks	Yes; Back-up duration typically 6 weeks	Yes; Back-up duration typically 6 weeks
• synchronizable	Yes	Yes	Yes	Yes	Yes
<b>Interfaces</b>					
Number of industrial Ethernet interfaces	1	1	1	0	1
Number of RS 485 interfaces	0	0	0	1	0
Number of USB interfaces	1; Up to 16 GB	1	1; Up to 16 GB	1; Up to 16 GB	1; Up to 16 GB
Number of SD card slots	0	0	0	0	0
<b>Protocols</b>					
PROFINET	Yes	Yes	Yes	No	Yes
IRT	No	No	No	No	No
PROFIBUS	No	No	No	Yes	No
MPI	No	No	No	Yes	No
<b>Redundancy mode</b>					
<b>Media redundancy</b>					
- MRP	No		No	No	No

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Article number	6AV2123-2DB03-0AX0 SIMATIC HMI KTP400 Basic	6AV2143-6DB00-0AA0 SIMATIC HMI TP400 Basic OEM	6AV2123-2GB03-0AX0 SIMATIC HMI KTP700 Basic	6AV2123-2GA03-0AX0 SIMATIC HMI KTP700 Basic DP	6AV2143-6GB00-0AA0 SIMATIC HMI TP700 Basic OEM
<b>Degree and class of protection</b>					
NEMA (front)					
• Enclosure Type 4x at the front	Yes	Yes	Yes	Yes	Yes
<b>Standards, approvals, certificates</b>					
CE mark	Yes	Yes	Yes	Yes	Yes
cULus	Yes	Yes	Yes	Yes	Yes
RCM (formerly C-TICK)	Yes	Yes	Yes	Yes	Yes
KC approval	Yes		Yes	Yes	Yes
EAC (formerly Gost-R)		Yes			
<b>Use in hazardous areas</b>					
• ATEX Zone 2	No	No	No	No	No
• ATEX Zone 22	No	No	No	No	No
• IECEx Zone 2	No		No	No	No
• IECEx Zone 22	No		No	No	No
• cULus Class I Zone 2, Division 2	No	No	No	No	No
• FM Class I Division 2	No	No	No	No	No
<b>Marine approval</b>					
• Germanischer Lloyd (GL)	Yes		Yes	Yes	Yes
• American Bureau of Shipping (ABS)	Yes		Yes	Yes	Yes
• Bureau Veritas (BV)	Yes		Yes	Yes	Yes
• Det Norske Veritas (DNV)	Yes		Yes	Yes	Yes
• Lloyds Register of Shipping (LRS)	Yes		Yes	Yes	Yes
• Nippon Kaiji Kyokai (Class NK)	Yes		Yes	Yes	Yes
• Polski Rejestr Statkow (PRS)	No		No	No	No
• Chinese Classification Society (CCS)	No		No	No	No
<b>Ambient conditions</b>					
Suited for indoor use	Yes			Yes	
Suited for outdoor use	No			No	
<b>Ambient temperature during operation</b>					
• Operation (vertical installation)					
- For vertical installation, min.	0 °C	0 °C	0 °C	0 °C	0 °C
- For vertical installation, max.	50 °C	50 °C	50 °C	50 °C	50 °C
<b>Relative humidity</b>					
• Operation, max.	90 %; no condensation	90 %	90 %; no condensation	90 %; no condensation	90 %; no condensation
<b>Configuration</b>					
<b>Configuration software</b>					
• STEP 7 Basic (TIA Portal)	Yes; via integrated WinCC Basic (TIA Portal)	Yes; via integrated WinCC Basic (TIA Portal)	Yes; via integrated WinCC Basic (TIA Portal)	Yes; via integrated WinCC Basic (TIA Portal)	Yes; via integrated WinCC Basic (TIA Portal)
• WinCC flexible Compact	No	No	No	No	No
• WinCC Basic (TIA Portal)	Yes	Yes	Yes	Yes	Yes
<b>Languages</b>					
<b>Online languages</b>					
• Number of online/runtime languages	10	10	10	10	10

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Article number	6AV2123-2DB03-0AX0 SIMATIC HMI KTP400 Basic	6AV2143-6DB00-0AA0 SIMATIC HMI TP400 Basic OEM	6AV2123-2GB03-0AX0 SIMATIC HMI KTP700 Basic	6AV2123-2GA03-0AX0 SIMATIC HMI KTP700 Basic DP	6AV2143-6GB00-0AA0 SIMATIC HMI TP700 Basic OEM
<b>Functionality under WinCC (TIA Portal)</b>					
Applications/options					
• Web browser	Yes		Yes	No	Yes
• SIMATIC WinCC Sm@rtServer	Yes; Available with WinCC (TIA Portal) V14 or higher		Yes; Available with WinCC (TIA Portal) V14 or higher	No	
Number of Visual Basic Scripts	No	No	No	No	No
Task planner	Yes	Yes	Yes	Yes	Yes
• time-controlled	No	No	No	No	No
• task-controlled	Yes	Yes	Yes	Yes	Yes
<b>Message system</b>					
• Bit messages					
- Number of bit messages	1 000	1 000	1 000	1 000	1 000
• Analog messages					
- Number of analog messages	25	25	25	25	25
• Message buffer					
- Number of entries	256	256	256	256	256
- Circulating buffer	Yes	Yes	Yes	Yes	Yes
- retentive	Yes	Yes	Yes	Yes	Yes
<b>Recipe management</b>					
• Number of recipes	50	50	50	50	50
• Size of internal recipe memory	256 kbyte	256 kbyte	256 kbyte	256 kbyte	256 kbyte
• Recipe memory expandable	No	No	No	No	No
<b>Variables</b>					
• Number of variables per device	800	800	800	800	800
• Number of variables per screen	100	100	100	100	100
<b>Images</b>					
• Number of configurable images	250	100	250	250	250
<b>Archiving</b>					
• Number of archives per device	2; One message and one process value archive	2	2; One message and one process value archive	2; One message and one process value archive	2
• Number of entries per archive	10 000	10 000	10 000	10 000	10 000
• Message archive	Yes	Yes	Yes	Yes	Yes
• Process value archive	Yes	Yes	Yes	Yes	Yes
• Archiving methods					
- Sequential archive	Yes	Yes	Yes	Yes	Yes
- Short-term archive	Yes	Yes	Yes	Yes	Yes
• Memory location					
- Memory card	No	No	No	No	No
- USB memory	Yes	Yes	Yes	Yes	Yes
- Ethernet	No	No	No	No	No
• Data storage format					
- CSV	No	Yes	No	No	No
- TXT	Yes	No	Yes	Yes	Yes
- RDB	No	No	No	No	No

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Article number	6AV2123-2DB03-0AX0 SIMATIC HMI KTP400 Basic	6AV2143-6DB00-0AA0 SIMATIC HMI TP400 Basic OEM	6AV2123-2GB03-0AX0 SIMATIC HMI KTP700 Basic	6AV2123-2GA03-0AX0 SIMATIC HMI KTP700 Basic DP	6AV2143-6GB00-0AA0 SIMATIC HMI TP700 Basic OEM
<b>Security</b>					
• Number of user groups	50		50	50	50
• Number of users	50		50	50	50
• SIMATIC Logon	No	No	No	No	No
<b>Transfer (upload/download)</b>					
• MPI/PROFIBUS DP	No	No	No	Yes	No
• Ethernet	Yes	Yes	Yes	No	Yes
<b>Process coupling</b>					
• S7-1200	Yes	Yes	Yes	Yes	Yes
• S7-1500	Yes	Yes	Yes	Yes	Yes
• S7-200	Yes	Yes	Yes	Yes	Yes
• S7-300/400	Yes	Yes	Yes	Yes	Yes
• LOGO!	Yes	Yes	Yes	Yes	Yes
• WinAC	Yes	Yes	Yes	Yes	Yes
• SIMOTION	Yes	Yes	Yes	Yes	Yes
• Allen Bradley (EtherNet/IP)	Yes	Yes	Yes	No	Yes
• Allen Bradley (DF1)	No	No	No	Yes	No
• Mitsubishi (MC TCP/IP)	Yes	Yes	Yes	No	Yes
• Mitsubishi (FX)	No	No	No	Yes	No
• OMRON (FINS TCP)	No	No	No	No	No
• OMRON (LINK/Multilink)	No	No	No	Yes	No
• Modicon (Modbus TCP/IP)	Yes	Yes	Yes	No	Yes
• Modicon (Modbus)	No	No	No	Yes	No
<b>Peripherals/Options</b>					
Printer	No	No	No	No	No
SIMATIC HMI MM memory card: Multi Media Card	No	No	No	No	No
SIMATIC HMI SD memory card: Secure Digital memory card	No	No	No	No	No
USB memory	Yes	Yes; USB storage medium can be connected	Yes	Yes	Yes
<b>Mechanics/material</b>					
Enclosure material (front)					
• Plastic	Yes	Yes	Yes	Yes	Yes
• Aluminum	No	No	No	No	No
• Stainless steel	No	No	No	No	No
<b>Dimensions</b>					
Width of the housing front	141 mm	141 mm	214 mm	214 mm	214 mm
Height of housing front	116 mm	116 mm	158 mm	158 mm	158 mm
Mounting cutout, width	123 mm	123 mm	197 mm	197 mm	197 mm
Mounting cutout, height	99 mm	99 mm	141 mm	141 mm	141 mm
Overall depth	33 mm	33 mm	39 mm	39 mm	39 mm
<b>Weights</b>					
Weight (without packaging)	360 g		780 g	800 g	780 g

## Technical specifications

Article number	<b>6AV2123-2JB03-0AX0</b> SIMATIC HMI KTP900 Basic	<b>6AV2143-6JB00-0AA0</b> SIMATIC HMI TP900 Basic OEM	<b>6AV2123-2MB03-0AX0</b> SIMATIC HMI KTP1200 Basic	<b>6AV2123-2MA03-0AX0</b> SIMATIC HMI KTP1200 Basic DP
<b>General information</b>				
Product type designation	KTP900 Basic color PN	TP900 Basic Keyless	KTP1200 Basic color PN	KTP1200 Basic color DP
<b>Display</b>				
Design of display	TFT widescreen display, LED backlighting	TFT widescreen display, LED backlighting	TFT widescreen display, LED backlighting	TFT widescreen display, LED backlighting
Screen diagonal	9 in	9 in	12 in	12 in
Number of colors	65 536	65 536	65 536	65 536
<b>Resolution (pixels)</b>				
• Horizontal image resolution	800 pixel	800 pixel	1 280 pixel	1 280 pixel
• Vertical image resolution	480 pixel	480 pixel	800 pixel	800 pixel
<b>Backlighting</b>				
• MTBF backlighting (at 25 °C)	20 000 h	20 000 h	20 000 h	20 000 h
<b>Control elements</b>				
<b>Keyboard fonts</b>				
• Function keys		No		
- Number of function keys	8	0	10	10
<b>Touch operation</b>				
• Design as touch screen	Yes	Yes	Yes	Yes
• Design as multi-touch screen		No		
• Monitor keyboard		Yes		
<b>Installation type/mounting</b>				
Mounting in portrait format possible	Yes	Yes	Yes	Yes
<b>Supply voltage</b>				
Rated value (DC)	24 V	24 V	24 V	24 V
<b>Memory</b>				
Memory available for user data	10 Mbyte	10 Mbyte	10 Mbyte	10 Mbyte
<b>Type of output</b>				
Acoustics				
• Buzzer	Yes	Buzzer Yes	Yes	Yes
<b>Time of day</b>				
<b>Clock</b>				
• Software clock	Yes	Yes	Yes	Yes
• retentive	Yes; Back-up duration typically 6 weeks	Yes; Back-up duration typically 6 weeks	Yes; Back-up duration typically 6 weeks	Yes; Back-up duration typically 6 weeks
• synchronizable	Yes	Yes	Yes	Yes
<b>Interfaces</b>				
Number of industrial Ethernet interfaces	1	1	1	0
Number of RS 485 interfaces	0	0	0	1
Number of USB interfaces	1; Up to 16 GB	1; USB 2.0, up to 16 GB respectively	1; Up to 16 GB	1; Up to 16 GB
Number of SD card slots	0	0	0	0
<b>Industrial Ethernet</b>				
• Number of ports of the integrated switch		0		

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#### Technical specifications

Article number	6AV2123-2JB03-0AX0	6AV2143-6JB00-0AA0	6AV2123-2MB03-0AX0	6AV2123-2MA03-0AX0
	SIMATIC HMI KTP900 Basic	SIMATIC HMI TP900 Basic OEM	SIMATIC HMI KTP1200 Basic	SIMATIC HMI KTP1200 Basic DP
<b>Protocols</b>				
PROFINET	Yes	Yes	Yes	No
IRT	No	No	No	No
PROFIBUS	No	No	No	Yes
MPI	No	No	No	Yes
<b>Redundancy mode</b>				
<b>Media redundancy</b>				
- MRP	No	No	No	No
<b>Degree and class of protection</b>				
NEMA (front)				
• Enclosure Type 4x at the front	Yes	Yes	Yes	Yes
<b>Standards, approvals, certificates</b>				
CE mark	Yes	Yes	Yes	Yes
cULus	Yes		Yes	Yes
RCM (formerly C-TICK)	Yes		Yes	Yes
KC approval	Yes		Yes	Yes
<b>Use in hazardous areas</b>				
• ATEX Zone 2	No		No	No
• ATEX Zone 22	No		No	No
• IECEx Zone 2	No		No	No
• IECEx Zone 22	No		No	No
• cULus Class I Zone 2, Division 2	No		No	No
• FM Class I Division 2	No		No	No
<b>Marine approval</b>				
• Germanischer Lloyd (GL)	Yes		Yes	Yes
• American Bureau of Shipping (ABS)	Yes		Yes	Yes
• Bureau Veritas (BV)	Yes		Yes	Yes
• Det Norske Veritas (DNV)	Yes		Yes	Yes
• Lloyds Register of Shipping (LRS)	Yes		Yes	Yes
• Nippon Kaiji Kyokai (Class NK)	Yes		Yes	Yes
• Polski Rejestr Statkow (PRS)	No		No	No
• Chinese Classification Society (CCS)	No		No	No
<b>Ambient conditions</b>				
Suited for indoor use				Yes
Suited for outdoor use				No
<b>Ambient temperature during operation</b>				
• Operation (vertical installation)				
- For vertical installation, min.	0 °C	0 °C	0 °C	0 °C
- For vertical installation, max.	50 °C	50 °C	50 °C	50 °C
<b>Relative humidity</b>				
• Operation, max.	90 %; no condensation	90 %; no condensation	90 %; no condensation	90 %; no condensation

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**Technical specifications**

Article number	<b>6AV2123-2JB03-0AX0</b> SIMATIC HMI KTP900 Basic	<b>6AV2143-6JB00-0AA0</b> SIMATIC HMI TP900 Basic OEM	<b>6AV2123-2MB03-0AX0</b> SIMATIC HMI KTP1200 Basic	<b>6AV2123-2MA03-0AX0</b> SIMATIC HMI KTP1200 Basic DP
<b>Configuration</b>				
<b>Configuration software</b>				
• STEP 7 Basic (TIA Portal)	Yes; via integrated WinCC Basic (TIA Portal)	Yes; via integrated WinCC Basic (TIA Portal)	Yes; via integrated WinCC Basic (TIA Portal)	Yes; via integrated WinCC Basic (TIA Portal)
• WinCC flexible Compact	No	No	No	No
• WinCC Basic (TIA Portal)	Yes	Yes	Yes	Yes
<b>Languages</b>				
<b>Online languages</b>				
• Number of online/runtime languages	10	10	10	10
<b>Functionality under WinCC (TIA Portal)</b>				
Applications/options				
• Web browser	Yes	No	Yes	No
• SIMATIC WinCC Sm@rtServer	Yes; Available with WinCC (TIA Portal) V14 or higher	No	Yes; Available with WinCC (TIA Portal) V14 or higher	No
Number of Visual Basic Scripts	No	No	No	No
Task planner	Yes	Yes	Yes	Yes
• time-controlled	No	No	No	No
• task-controlled	Yes	Yes	Yes	Yes
<b>Message system</b>				
• Bit messages				
- Number of bit messages	1 000	1 000	1 000	1 000
• Analog messages				
- Number of analog messages	25	25	25	25
• Message buffer				
- Number of entries	256	256	256	256
- Circulating buffer	Yes	Yes	Yes	Yes
- retentive	Yes	Yes	Yes	Yes
<b>Recipe management</b>				
• Number of recipes	50	50	50	50
• Size of internal recipe memory	256 kbyte	256 kbyte	256 kbyte	256 kbyte
• Recipe memory expandable	No		No	No
<b>Variables</b>				
• Number of variables per device	800	800	800	800
• Number of variables per screen	100	100	100	100
<b>Images</b>				
• Number of configurable images	250	100	250	250
<b>Archiving</b>				
• Number of archives per device	2; One message and one process value archive	2	2; One message and one process value archive	2; One message and one process value archive
• Number of entries per archive	10 000	10 000	10 000	10 000
• Message archive	Yes	Yes	Yes	Yes
• Process value archive	Yes	Yes	Yes	Yes
• Archiving methods				
- Sequential archive	Yes	Yes	Yes	Yes
- Short-term archive	Yes	Yes	Yes	Yes
• Memory location				
- Memory card	No	No	No	No
- USB memory	Yes	Yes	Yes	Yes
- Ethernet	No	No	No	No
• Data storage format				
- CSV	No	No	No	No
- TXT	Yes	Yes	Yes	Yes
- RDB	No	No	No	No



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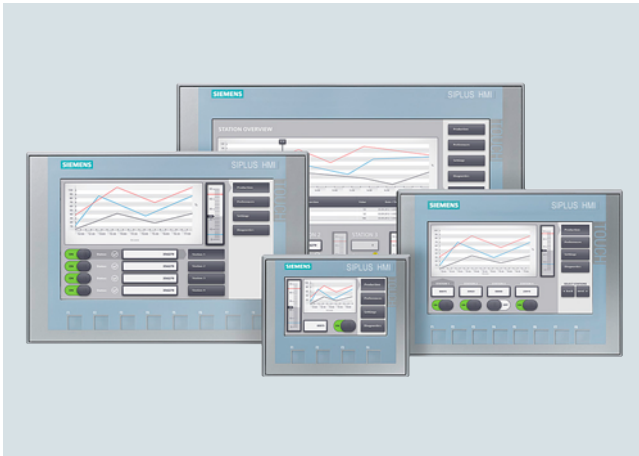
#### Technical specifications

Article number	6AV2123-2JB03-0AX0 SIMATIC HMI KTP900 Basic	6AV2143-6JB00-0AA0 SIMATIC HMI TP900 Basic OEM	6AV2123-2MB03-0AX0 SIMATIC HMI KTP1200 Basic	6AV2123-2MA03-0AX0 SIMATIC HMI KTP1200 Basic DP
<b>Security</b>				
• Number of user groups	50		50	50
• Number of users	50		50	50
• SIMATIC Logon	No	No	No	No
<b>Transfer (upload/download)</b>				
• MPI/PROFIBUS DP	No	No	No	Yes
• Ethernet	Yes	Yes	Yes	No
<b>Process coupling</b>				
• S7-1200	Yes	Yes	Yes	Yes
• S7-1500	Yes	Yes	Yes	Yes
• S7-200	Yes	Yes	Yes	Yes
• S7-300/400	Yes	Yes	Yes	Yes
• LOGO!	Yes	Yes	Yes	Yes
• WinAC	Yes	Yes	Yes	Yes
• SIMOTION	Yes	Yes	Yes	Yes
• Allen Bradley (EtherNet/IP)	Yes	Yes	Yes	No
• Allen Bradley (DF1)	No	No	No	Yes
• Mitsubishi (MC TCP/IP)	Yes	Yes	Yes	No
• Mitsubishi (FX)	No	No	No	Yes
• OMRON (FINS TCP)	No	No	No	No
• OMRON (LINK/Multilink)	No	No	No	Yes
• Modicon (Modbus TCP/IP)	Yes	Yes	Yes	No
• Modicon (Modbus)	No	No	No	Yes
<b>Peripherals/Options</b>				
Printer	No	No	No	No
SIMATIC HMI MM memory card: Multi Media Card	No	No	No	No
SIMATIC HMI SD memory card: Secure Digital memory card	No	No	No	No
USB memory	Yes	Yes; USB storage medium can be connected	Yes	Yes
<b>Mechanics/material</b>				
Enclosure material (front)				
• Plastic	Yes	Yes	Yes	Yes
• Aluminum	No	No	No	No
• Stainless steel	No	No	No	No
<b>Dimensions</b>				
Width of the housing front	267 mm	267 mm	330 mm	330 mm
Height of housing front	182 mm	182 mm	245 mm	245 mm
Mounting cutout, width	251 mm	251 mm	310 mm	310 mm
Mounting cutout, height	166 mm	166 mm	221 mm	221 mm
Overall depth	55 mm	55 mm	60 mm	60 mm
<b>Weights</b>				
Weight (without packaging)	1 130 g	1 130 g	1 710 g	1 710 g

More information is available on the Internet at:

<http://www.siemens.com/basic-panels>

## Overview



With their fully developed HMI basic functions, 2<sup>nd</sup> Generation SIPLUS Basic Panels are the ideal entry-level series for simple HMI applications.

The device family offers panels with 4", 7", 9" and 12" displays, as well as combined key and touch operation.

The innovative high-resolution widescreen displays with 64 000 colors are also suitable for upright installation, and they can be dimmed down to 100%. The innovative operator interface with improved usability opens up a diverse range of options thanks to new controls and graphics. The new USB interface enables the connection of keyboard, mouse or barcode scanner, and supports the simple archiving of data on a USB flash drive.

The integrated Ethernet or RS 485/422 interface (version-specific) enables simple connection to the controller.

Note:

SIPLUS extreme products are based on SIMATIC standard products. The contents listed here were taken from the respective standard products.

**SIPLUS extreme-specific information was added.**

Technical documentation on SIPLUS can be found here: <http://www.siemens.com/siplus-extreme>

## Ordering data

## Article No.

*SIPLUS HMI Basic Panels, Key and Touch***SIPLUS HMI KTP400 Basic****6AG1123-2DB03-2AX0**

For areas with extreme exposure to environmental substances (conformal coating); ambient temperature -20 ... +60 °C

**SIPLUS HMI KTP700 Basic****6AG1123-2GB03-2AX0**

For areas with extreme exposure to environmental substances (conformal coating); ambient temperature -20 ... +50 °C

**SIPLUS HMI KTP700 Basic DP****6AG1123-2GA03-2AX0**

For areas with extreme exposure to environmental substances (conformal coating); ambient temperature -20 ... +50 °C

**SIPLUS HMI KTP900 Basic****6AG1123-2JB03-2AX0**

For areas with extreme exposure to environmental substances (conformal coating); ambient temperature -20 ... +50 °C

**SIPLUS HMI KTP1200 Basic****6AG1123-2MB03-2AX0**

For areas with extreme exposure to environmental substances (conformal coating); ambient temperature -10 ... +50 °C

**SIPLUS HMI KTP1200 Basic DP****6AG1123-2MA03-2AX0**

For areas with extreme exposure to environmental substances (conformal coating); ambient temperature -10 ... +50 °C

*Accessories*See SIMATIC Basic Panels 2<sup>nd</sup> Generation

# Operator panels

Basic HMI

Basic Panels

## SIPLUS Basic Panels (2nd Generation)

### Technical specifications

Article number	<b>6AG1123-2DB03-2AX0</b> SIPLUS HMI KTP400 BASIC	<b>6AG1123-2GB03-2AX0</b> SIPLUS HMI KTP700 BASIC	<b>6AG1123-2GA03-2AX0</b> SIPLUS HMI KTP700 BASIC DP
<b>Ambient conditions</b>			
Suited for indoor use		Yes	Yes
Suited for outdoor use		No	No
<b>Ambient temperature during operation</b>			
• Operation (vertical installation)			
- For vertical installation, min.	-20 °C; = Tmin	-20 °C	-20 °C; = Tmin
- For vertical installation, max.	60 °C; = Tmax	50 °C	50 °C
<b>Altitude during operation relating to sea level</b>			
• Installation altitude above sea level, max.	5 000 m	5 000 m	5 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
<b>Relative humidity</b>			
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)	100 %; RH incl. condensation/frost (no commissioning when condensation present), vertical mounting position
<b>Resistance</b>			
<b>Coolants and lubricants</b>			
- Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air
<b>Use in stationary industrial systems</b>			
- to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
- to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *	Yes; Class 3S4 incl. sand, dust, *	Yes; Class 3S4 incl. sand, dust, *
<b>Use on ships/at sea</b>			
- to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
- to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *
<b>Usage in industrial process technology</b>			
- Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)
- Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
<b>Remark</b>			
- Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!
<b>Conformal coating</b>			
• Coatings for printed circuit board assemblies acc. to EN 61086	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability
• Protection against fouling acc. to EN 60664-3	Yes; Type 1 protection	Yes; Type 1 protection	Yes; Type 1 protection
• Military testing according to MIL-I-46058C, Amendment 7	Yes; Discoloration of coating possible during service life	Yes; Discoloration of coating possible during service life	Yes; Discoloration of coating possible during service life
• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A

## Technical specifications

Article number	6AG1123-2JB03-2AX0 SIPLUS HMI KTP900 BASIC	6AG1123-2MB03-2AX0 SIPLUS HMI KTP1200 BASIC	6AG1123-2MA03-2AX0 SIPLUS HMI KTP1200 BASIC DP
<b>Ambient conditions</b>			
Suited for indoor use	Yes	Yes	Yes
Suited for outdoor use	No	No	No
<b>Ambient temperature during operation</b>			
• Operation (vertical installation)			
- For vertical installation, min.	-20 °C	-10 °C; = Tmin	-10 °C; = Tmin
- For vertical installation, max.	50 °C	50 °C	50 °C
<b>Altitude during operation relating to sea level</b>			
• Installation altitude above sea level, max.	5 000 m	5 000 m	5 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m) // Tmin ... (Tmax - 10 K) at 795 hPa ... 658 hPa (+2 000 m ... +3 500 m) // Tmin ... (Tmax -20 K) at 658 hPa ... 540 hPa (+3 500 m ... +5 000 m)
<b>Relative humidity</b>			
• With condensation, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)	100 %; RH incl. condensation / frost (no commissioning in bedewed state), horizontal installation	100 %; RH incl. condensation/frost (no commissioning when condensation present), vertical mounting position
<b>Resistance</b>			
<b>Coolants and lubricants</b>			
- Resistant to commercially available coolants and lubricants	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air	Yes; Incl. diesel and oil droplets in the air
<b>Use in stationary industrial systems</b>			
- to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
- to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
- to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *	Yes; Class 3S4 incl. sand, dust, *	Yes; Class 3S4 incl. sand, dust, *
<b>Use on ships/at sea</b>			
- to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request		
- to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *		
- to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *	Yes; Class 6S3 incl. sand, dust; *
<b>Usage in industrial process technology</b>			
- Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)	Yes; Class 3 (excluding trichlorethylene)
- Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)		
<b>Remark</b>			
- Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!	* The supplied plug covers must remain in place over the unused interfaces during operation!
<b>Conformal coating</b>			
• Coatings for printed circuit board assemblies acc. to EN 61086	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability	Yes; Class 2 for high reliability
• Protection against fouling acc. to EN 60664-3	Yes; Type 1 protection	Yes; Type 1 protection	Yes; Type 1 protection
• Military testing according to MIL-I-46058C, Amendment 7	Yes; Discoloration of coating possible during service life	Yes; Discoloration of coating possible during service life	Yes; Discoloration of coating possible during service life
• Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A	Yes; Conformal coating, Class A

More information is available on the Internet at:

<http://www.siemens.com/basic-panels>