

## Data sheet

**6AV2143-8JB50-0AA0**

SIMATIC HMI, IWP900, Industrial Web panel, key/touch operation, 9" TFT display, 65536 colors, PROFINET interface, HTML5, stand-alone, no WinCC configuration required, contains Open Source software, which is provided free of charge

General information	
Product type designation	IWP900
Display	
Design of display	TFT widescreen display, LED backlighting
Screen diagonal	9 in
Display width	198 mm
Display height	111.7 mm
Number of colors	65 536
Resolution (pixels)	
• Horizontal image resolution	800 pixel
• Vertical image resolution	480 pixel
Backlighting	
• MTBF backlighting (at 25 °C)	20 000 h
• Backlight dimmable	Yes
Control elements	
Keyboard fonts	
• Function keys	
— Number of function keys	8
— Number of function keys with LEDs	0
• Keys with LED	No
• System keys	No
• Numeric keyboard	Yes; Onscreen keyboard
• alphanumeric keyboard	Yes; Onscreen keyboard
Touch operation	
• Design as touch screen	Yes; Analog-resistive
• Design as multi-touch screen	No
• Monitor keyboard	Yes
Installation type/mounting	
Mounting type	Mounting clips
Mounting position	vertical
Mounting in portrait format possible	Yes
Mounting in landscape format possible	Yes
maximum permissible angle of inclination without external ventilation	35°
RFID reader can be installed	No
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)	230 mA
Starting current inrush I <sub>t</sub>	0.2 A <sup>2</sup> ·s
Power	
Active power input, typ.	5.5 W
Processor	
Processor type	ARM
Memory	
Type of memory	DDR3-SDRAM
Flash	Yes

RAM	Yes
Memory available for user data	10 Mbyte

## Type of output

Acoustics	
• Buzzer	Yes
• Speaker	No

## Time of day

Clock	
• Hardware clock (real-time)	Yes
• Software clock	Yes
• retentive	Yes; Back-up duration typically 6 weeks
• synchronizable	Yes

## Interfaces

Number of industrial Ethernet interfaces	1
Number of RS 485 interfaces	0
Number of RS 422 interfaces	0
Number of RS 232 interfaces	0
Number of USB interfaces	1; Up to 16 GB
Number of 20 mA interfaces (TTY)	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
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## Protocols

PROFINET	Yes
Supports protocol for PROFINET IO	No
IRT	No
PROFIBUS	No
EtherNet/IP	No
MPI	No

### Protocols (Ethernet)

• TCP/IP	Yes
• DHCP	Yes
• SNMP	Yes
• DCP	Yes
• LLDP	Yes

### WEB characteristics

• HTTP	Yes
• HTTPS	Yes
• HTML	Yes
• XML	Yes
• CSS	Yes
• JavaScript	Yes

### Redundancy mode

Media redundancy	
— MRP	No

### Further protocols

• MODBUS	No
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## EMC

### Emission of radio interference acc. to EN 55 011

• Limit class A, for use in industrial areas	Yes
• Limit class B, for use in residential areas	No

## Degree and class of protection

IP (at the front)	IP65
IP (rear)	IP20
NEMA (front)	
• Enclosure Type 4 at the front	Yes
• Enclosure Type 4x at the front	Yes

## Standards, approvals, certificates

CE mark	Yes
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cULus	Yes
RCM (formerly C-TICK)	No
KC approval	No
<b>Use in hazardous areas</b>	
• ATEX Zone 2	No
• ATEX Zone 22	No
• IECEx Zone 2	No
• IECEx Zone 22	No
• cULus Class I Zone 1	No
• cULus Class I Zone 2, Division 2	No
• FM Class I Division 2	No
<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
• Chinese Classification Society (CCS)	No
<b>Ambient conditions</b>	
<b>Ambient temperature during 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, max.	40 °C
Operation (vertical installation, portrait format)	
— For vertical installation, min.	0 °C
— For vertical installation, max.	40 °C
Operation (max. tilt angle, portrait format)	
— At maximum tilt angle, min.	0 °C
— At maximum tilt angle, max.	35 °C
<b>Ambient temperature during storage/transportation</b>	
• min.	-20 °C
• max.	60 °C
<b>Relative humidity</b>	
• Operation, max.	90 %; no condensation
<b>Operating systems</b>	
proprietary	Yes
<b>pre-installed operating system</b>	
• Windows CE	No
<b>Languages</b>	
<b>Online languages</b>	
• Number of online/runtime languages	2
<b>Peripherals/Options</b>	
Printer	No
SIMATIC HMI MM memory card: Multi Media Card	No
SIMATIC HMI SD memory card: Secure Digital memory card	No
SIMATIC HMI CF memory card Compact Flash Card	No
USB memory	Yes
SIMATIC IPC USB Flashdrive (USB stick)	Yes
SIMATIC HMI USB stick	Yes
<b>Mechanics/material</b>	
<b>Enclosure material (front)</b>	
• Plastic	Yes
• Aluminum	No
• Stainless steel	No
<b>Dimensions</b>	
Width of the housing front	267 mm

Height of housing front	182 mm
Mounting cutout, width	251 mm
Mounting cutout, height	166 mm
Overall depth	40 mm

Weights

Weight (without packaging)	1 130 g
Weight (with packaging)	1 393 g

**last modified:** 10/8/2021 