SIEMENS

Data sheet

6AV2143-8MB50-0AA0

SIMATIC HMI, IWP1200, Industrial Web panel, key/touch operation, 12"
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	IWP1200
Display	
Design of display	TFT widescreen display, LED backlighting
Screen diagonal	12 in
Display width	261.1 mm
Display height	163.2 mm
Number of colors	65 536
Resolution (pixels)	
● Horizontal image resolution	1 280 pixel
● Vertical image resolution	800 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)	510 mA
Starting current inrush I²t	0.2 A²·s
Power	
Active power input, typ.	12.2 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

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

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

cULus	Yes
RCM (formerly C-TICK)	No
KC approval	No

Use in hazardous areas	
● 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

Marine approval	
● 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

Ambient conditions

Ambient temperature during operation	
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
Ambient temperature during storage/transportation	
● min.	-20 °C
● max.	60 °C
Relative humidity	
● Operation, max.	90 %; no condensation

Operating systems

proprietary	Yes
pre-installed operating system	
● Windows CE	No

Languages

Online languages	
● Number of online/runtime languages	2

Peripherals/Options

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

Mechanics/material

Enclosure material (front)	
● Plastic	Yes
● Aluminum	No
● Stainless steel	No

Dimensions

Width of the housing front	330 mm

Height of housing front	245 mm
Mounting cutout, width	310 mm
Mounting cutout, height	221 mm
Overall depth	60 mm
Weights	
Weight (without packaging)	1 710 g
Weight (with packaging)	2.2 kg

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