

SIMATIC HMI IM-312A multi-touch industrial monitor 12" (resolution 1280 x 800)
power supply; 12/24 V DC 1 x DP, 1 x HDMI 1 x USB type A & 1 x USB type



General information	
Product type designation	SIMATIC HMI IM-312A
Short designation	IM-312A
Display	
Design of display	TFT widescreen display, LED backlighting
Screen diagonal	12.1 in
Display width	261.1 mm
Display height	163.2 mm
On Screen Display (OSD) configuration	No; Adjustable by means of software
Number of colors	16 000 000; 16 million
Viewing angle	160° x 160°
Resolution (pixels)	
• Horizontal image resolution	1 280 pixel
• Vertical image resolution	800 pixel
General features	
• Brightness/contrast	400 cd/m ² / 800:1
• Detachable from computer unit	5 m
• Luminance	400 cd/m ²
Backlighting	
• Type of backlighting	LED, dimmable
• MTBF backlighting (at 25 °C)	50 000 h
• Backlight dimmable	Yes; 10 ... 100%
Control elements	
Input device	
• Integrated mouse cursor control	No
Touch operation	
• Design as touch screen	Yes; Projective-capacitive
• Design as multi-touch screen	Yes
• Monitor keyboard	No
Installation type/mounting	
VESA mounting	Yes; VESA 100 x 100
Mounting in portrait format possible	Yes
Mounting in landscape format possible	Yes
Built-in unit	Yes; Portrait mode possible
maximum permitted forward tilt angle from vertical	45°
maximum permitted backward tilt angle from vertical	45°
Supply voltage	
Type of supply voltage	12-24 V DC
Rated value (DC)	24 V; 12/24 V DC

permissible range, lower limit (DC)	9 V	
permissible range, upper limit (DC)	36 V	
Input current		
current consumption (for rated value of supply voltage), min.	0.43 A	
current consumption (for rated value of supply voltage), max.	1.7 A	
Starting current inrush I _p t	0.1 A ² ·s	
Power loss		
Power loss, typ.	15.5 W	
Power loss, max.	17 W	
Interfaces		
Number of USB interfaces	1; USB 2.0 (downstream)	
Video interfaces		
• DisplayPort	Yes; Display port V1.2	
Touch interfaces		
• USB	Yes; USB 2.0	
Degree and class of protection		
IP (at the front)	IP65	
IP (rear)	IP40 (cabinet mounting) / IP20 (VESA)	
Standards, approvals, certificates		
CE mark	Yes; also UKCA	
RCM (formerly C-TICK)	Yes	
FCC	Yes	
EMC	CE, EN 61000-6-4, EN 61000-6-2	
Ambient conditions		
Ambient temperature during operation		
• min.	0 °C	
• max.	60 °C	
Ambient temperature during storage/transportation		
• min.	-20 °C	
• max.	70 °C	
Relative humidity		
• Operation, max.	85 %; no condensation	
Vibrations		
• Vibration load in operation	10 m/s ²	
• Vibration load during transport/storage	10 m/s ²	
Shock testing		
• Shock load during operation	150 m/s ²	
• shock acceleration during storage/transport	250 m/s ²	
Mechanics/material		
Enclosure material (front)		
• Aluminum	Yes	
• Glass	Yes	
Dimensions		
Width of the housing front	306 mm	
Height of housing front	215 mm	
Mounting cutout, width	290 mm	
Mounting cutout, height	199 mm	
mounting depth	47 mm	
Weights		
Weight (without packaging)	1.8 kg	
Weight (with packaging)	2.8 kg	
Classifications		
	Version	Classification
eClass	14	19-20-02-01
eClass	12	19-20-02-01
eClass	9.1	19-20-02-01
eClass	9	19-20-02-01

eClass	8	19-20-02-01
eClass	7.1	19-20-02-01
eClass	6	19-20-02-01
ETIM	10	EC004862
ETIM	9	EC001428
ETIM	8	EC001428
ETIM	7	EC001428

Approvals / Certificates

General Product Approval

[Manufacturer Declaration](#)



General Product Approval

EMV

Environment



last modified:

6/6/2025