

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 _{st} | 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 |

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| 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](#)



[KC](#)



General Product Approval

EMV

Environment



[KC](#)



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