

W22ITWS-MHB1-EX

21.5" Intel® Core™ i5-1135G7 C1D2 HMI Panel PC



KEY FEATURES

- Intel® 11th Generation Tiger Lake UP3 Core™ i5 CPU, HMI Panel PC
- Signature true flat display screen with edge-to-edge design
- Aluminum, anti-corrosion treated housing
- Superior sealing with front IP65 protection against dust and water
- Projected Capacitive Multi-Touch Screen (PCAP)
- Fanless Design, C1D2 HMI Panel PC
- Support wide range 9-29 V DC input
- Quick & Easy Removable 2.5" SSD Bay Slot
- Support PCIe x4 Card
- C1D2 & IECEx certificated, Compliance with ATEX grade zone 2

INTRODUCTION

Winmate ATEX M Series HMI is designed for hazardous environments, certified for C1D2, IECEx, and ATEX Zone 2 compliance. Available in sizes from 12.1" to 24", it features Intel® processors, multi-OS support, and a sleek true-flat PCAP touch display. With fanless operation, anti-corrosion aluminum housing, and front IP65 protection, it offers durability and reliability. Its wide 9-29V DC input, removable SSD bay, and PCIe x4 support make it ideal for industrial automation in oil, gas, and chemical industries.

SPECIFICATIONS

Display

| | | | |
|-----------------------|---|-------------------------|------------------|
| Resolution | 1920x1080 | Size | 21.5 inches |
| Contrast Ratio | 1000:1 | Panel Brightness | 350.0 nits |
| View Angles | 89, 89, 89, 89 | Active Area | 476.64x268.11 mm |
| Touch / Glass | Projected Capacitive Multi Touch Screen | | |

System Specification

| | | | |
|----------------------------|--|------------------|---|
| WLAN | Support (Optional) | BT | Support (Optional) |
| Expansion Port | Modular Design for easy service in the field | Processor | Intel Core i5-1135G7 2.4GHz (up to 4.2GHz) |
| Memory | 2 x SO-DIMM, DDR4 3200 MHz, 4GB 8GB (Optional) 16GB (Optional) 32GB (Optional) | Storage | 1 x M.2 2280 NVMe SSD, 128GB up to 512GB 1 x 2.5" Removable 256GB SSD up to 512GB (Optional) |
| Ethernet controller | Intel® Ethernet Controller I211-AT + Intel® Ethernet Connection I219-LM | Security | Trusted Platform Module (TPM) 2.0 |
| Operating System | Windows 11 IoT Enterprise (64 bit) (Optional) Windows 11 Pro 64 bit (Optional) Linux Ubuntu 22.04(Do not support Wake on Touch) (Optional) | | |

Mechanical

| | | | |
|-----------------------|---------------------------|------------------|---------------|
| Dimension | 532.6 x 324.1 x 94.2 mm | Weight | 11.0 kg |
| Mounting | Panel mount VESA Mount | Enclosure | Metal Housing |
| Cooling System | Fanless design | Cut out | 504 x 304 mm |

Environment

| | | | |
|----------------------------|-------------------------------|------------------------------|---------------|
| Operating Humidity | 10% to 90% RH, Non-Condensing | Operating Temperature | -20°C to 60°C |
| Storage Temperature | -20°C to 60°C | | |

Certification

| | |
|----------------------|--|
| Certification | CE, FCC Class 1, Division 2, Group A, B, C, D, T5 IECEX Ex ec IIC T4 Gc Compliance with ATEX grade zone 2 |
|----------------------|--|

IO Ports

| | | | |
|--------------------|--|-----------------------|---|
| Power Input | 1 x 9~29V DC, 3-Pin Terminal Block | USB Port | 4 x USB 3.2 Gen.1 (Type-A) |
| Serial Port | 2 x RS232/422/485 (Default RS232) 1 x RS232 | Video | 1 x DP1.4 1 x HDMI 2.0 (Optional) |
| Audio | 1 x Audio Combo Connector (Mic in / Line Out) | Expansion Port | 1 x mPCIe slot 1 x PCIe x16 slot (x4 signal)(module max size:180x121mm) 1 x M.2 2230 Key E slot for WiFi 1 x M.2 2280 Key M slot for NVMe SSD Swappable 2.5" HDD/SSD Bay Slot |
| LAN | 2 x Giga LAN RJ45 Connector | Indicator | 1 x LED Indicator for storage |

Control

| | |
|---------------|---|
| Button | 1 x Power Button with LED Indicator 1 x Reset Button |
|---------------|---|

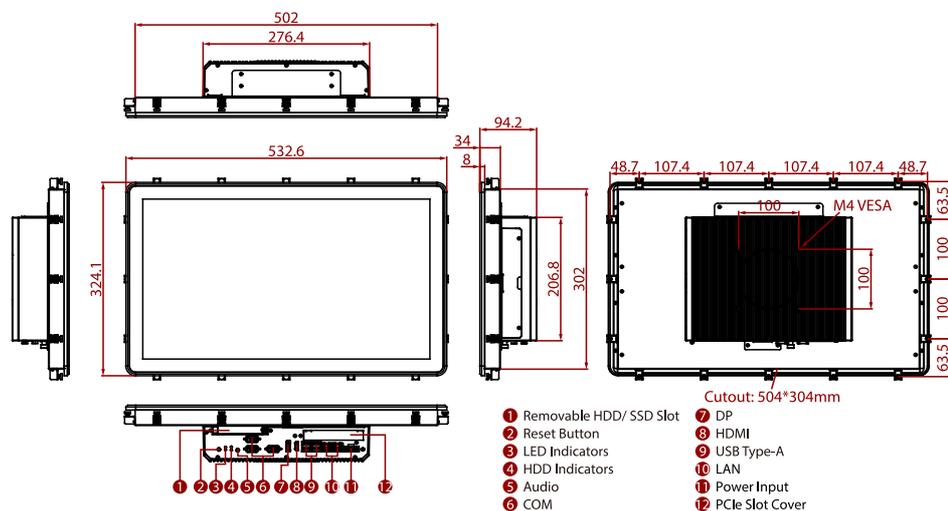
Accessory

| | |
|------------------|--|
| Accessory | 100~240V AC to DC Adapter Power Cord Open Wire Cable with terminal block connector Mounting clips VESAs screws |
|------------------|--|

Power

| | | | |
|---------------------|--------------------------------|----------------|----------|
| Power Rating | 9V~29V DC with protection fuse | Adapter | 12V 120W |
| Consumption | 60W~70W | | |

DIMENSIONS UNIT:MM



NOTE

1. This is a simplified drawing and some components are not marked in detail.
2. The product shown in this datasheet is a standard model. For diagrams that contain customized or optional I/O, please contact the Winmate Sales Team for more information.
3. All specifications are subject to change without prior notice.