

W22ITWS-MHA3

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



CE

FC

KEY FEATURES

- Intel® 11th Generation Tiger Lake UP3 Core™ i5 CPU
- 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
- Support wide range 9-29 V DC input
- One Quick & Easy Removable 2.5" SSD Bay Slot

INTRODUCTION

Winmate M Series HMI offers a versatile and durable solution for industrial and commercial applications, with screen sizes ranging from 12.1" to 24". Powered by Intel® 11th Generation Tiger Lake UP3 Core™ i5 CPUs, it supports multiple OS options and features a true flat, edge-to-edge PCAP touch display for seamless user interaction. Built with an anti-corrosion aluminum housing and front IP65 protection, it withstands dust, water, and harsh environments. Its modular design allows easy upgrades or replacements, while the fanless architecture ensures quiet, reliable operation. Ideal for demanding settings requiring flexibility and durability.

SPECIFICATIONS

Display			
Resolution	1920x1080	Size	21.5 inches
Contrast Ratio	3000:1	Panel Brightness	250.0 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 2 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 Svsstem	Fanless design	Cut out	504 x 304 mm

Environment

Operating Humidity	10% to 90% RH, Non-Condensing	Operating Temperature	0°C to 50°C
Storage Temperature	-10°C to 60°C	IP rating	Front IP65

Certification

Certification	CE, FCC
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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)	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
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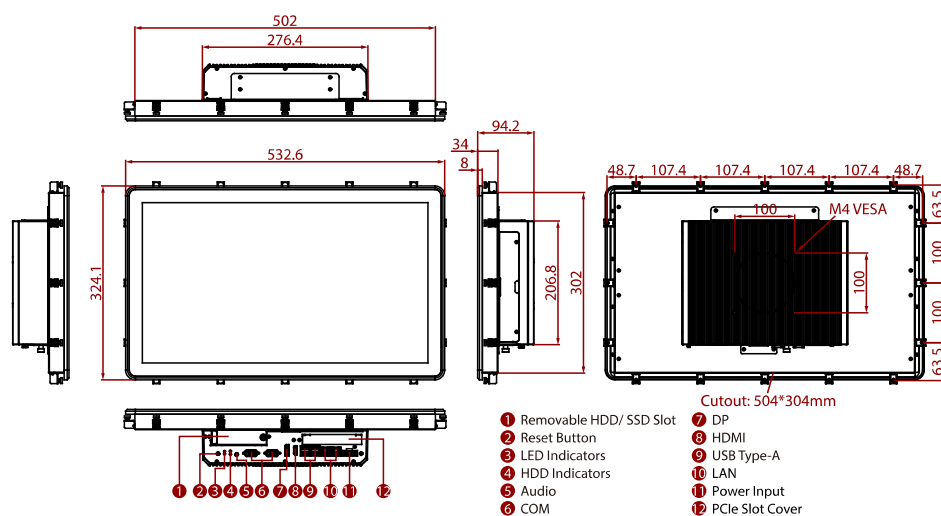
Accessory

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