

R12ITWS-MHM2-EX

12.1" 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	1024x768	Size	12.1 inches
Contrast Ratio	1000:1	Panel Brightness	500.0 nits
View Angles	89,89,89,89	Active Area	245.76x184.32 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	322 x 256 x 91 mm	Weight	5.4kg
Mounting	Panel mount VESA Mount	Enclosure	Metal Housing
Cooling System	Fanless design	Cut out	301 x 237 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
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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) 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
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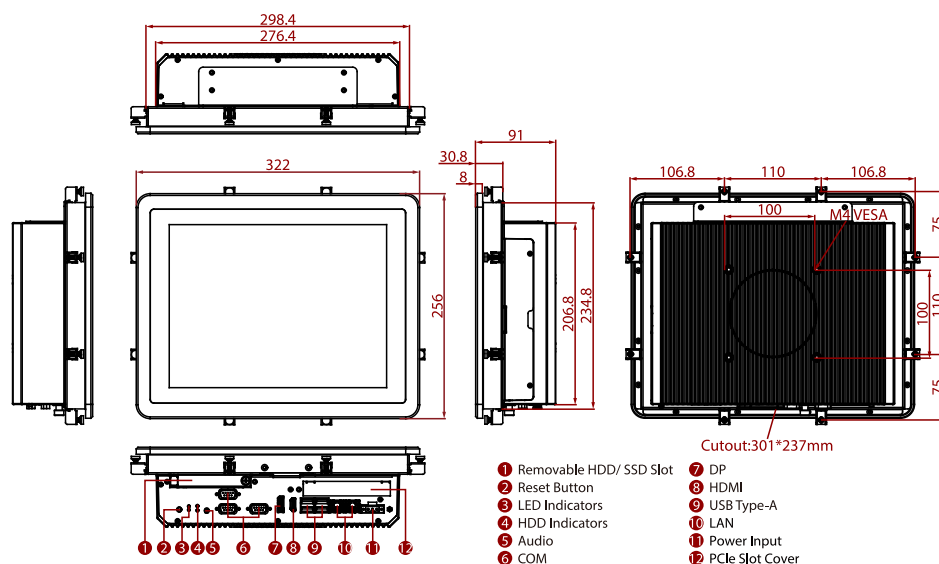
Accessory

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	45W~55W		

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.