

FM12AD-V

12.1" Windows Warehouse Computer with Intel® Alder Lake Processor



KEY FEATURES

- 12th Gen. Intel® Processor Family – Alder Lake Processor
- 12.1" 1024 x 768 Panel with PCAP touch screen warehouse computer
- IP65 waterproof and dustproof
- Wide power input 10-60V DC with ignition
- Wide range operating temperature
- Support VESA Mount

INTRODUCTION

Winmate FM-V Series Windows Vehicle Mounted Computer (VMC) is designed for reliable performance in demanding industrial and automotive environments. Available in sizes from 7" to 14", it offers processor options ranging from Intel® Celeron® N6211 and N3350 to the powerful 12th Gen Intel® Alder Lake processors. Built with an IP65-rated waterproof and dustproof enclosure, wide 10-60V DC power input with ignition support, and a rugged design for extreme temperatures, the FM-V Series ensures durability and efficiency. VESA mount compatibility provides easy installation, making it ideal for fleet management, logistics, and warehouse operations.

SPECIFICATIONS

Display

Type	Projected Capacitive Multi Touch	Touch Mode	Support Hand, Stylus, Glove Mode
Resolution	1024x768	Size	12.1 inches
Contrast Ratio	1000:1	Panel Brightness	400 nits 800 nits(Optional)
View Angles	89,89,89,89		

System Specification

Processor	Intel® Core™ i5-1235U 3.30 GHz (up to 4.40 GHz)	Memory	1 x DDR5 SDRAM 8GB 16GB (Optional) 32GB (Optional)
Storage	NVMe SSD 128GB 256GB (Optional) 512GB (Optional)	Security	TPM 2.0
Operating System	Windows 10 IoT Enterprise LTSC (64 bit) Windows 11 IoT Enterprise LTSC (64 bit) (Optional)	WLAN	Support
BT	Support	WWAN	LTE/5G Sub 6 (Optional)
GNSS	GPS/GLONASS (Optional)	Sensors	G-Sensor, Light Sensor, Temp Sensor

Camera

Front Camera	2MP Camera
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Mechanical

Dimension	307 x 225 x 57 mm	Weight	2.5 kg
Mounting	VESA mount	Cooling System	Fanless Design

IO Ports

USB Port	1 x USB 3.0 Type C 1 x USB 2.0 Port	Serial Port	2 x RS232/422/485 (Default RS232)
SD Card Slot	1 x Micro SD Card Slot	SIM Card Slot	1 x Dual-Nano SIM Card Slot
Audio	1 x Audio(Mic in & Line Out) either one with DIDO (Optional)	LAN	1 x Gigabit LAN port PSE (IEEE 802.3at 30W) (Optional)
Indicator	4 x LED Indicator	DIDO	1 x DIDO (2XDI ; 2XDO) either one with Audio (Optional)
CANBUS	1 x CANBus (Optional)		

Environment

Operating Humidity	5% to 95% RH, Non-Condensing	Operating Temperature	-30°C to 60°C
Storage Temperature	-30°C to 60°C	Shock	MIL-STD-810H Method 516.8 Procedure I
Vibration	MIL-STD-810H Method 514.8 Procedure I	IP rating	IP65
Impact	Support EN62262 IK07 Rating	ESD	Compliant with EN 61000-4-2, Enhanced ESD to ±8kV Direct & ±12kV Air

Certification

Certification	CE, FCC FCC (Electromagnetic Emissions), IC (ICES-003) UL60950-1, EN60950-1, PTCRB
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Control

Button	1 x Power Button, 5 x Function Button (Programmable Function Key Configured by Winset)
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Power

Battery	2400mAh UPS Battery for 1 hour backup (Optional)	Power Rating	10V~60V with ignition control
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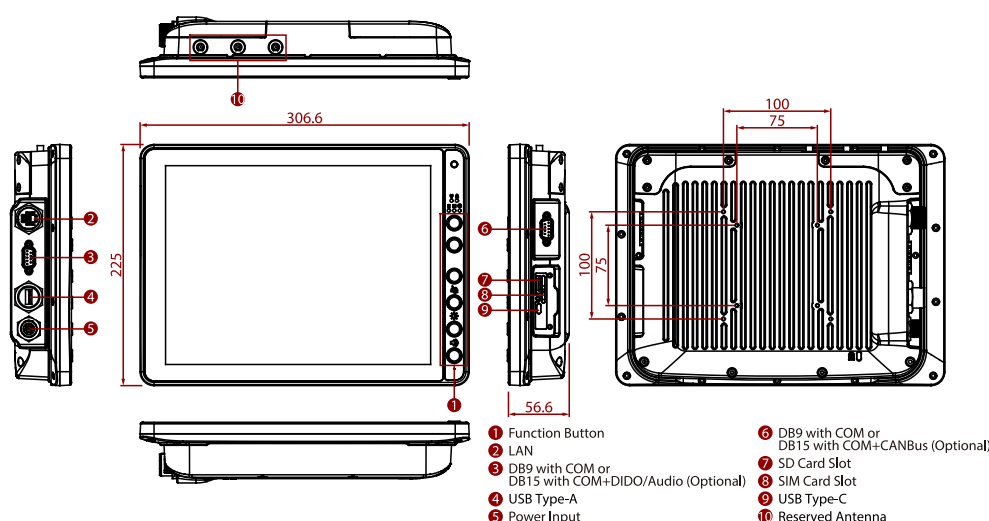
Security Function

SOTI MobiControl	SOTI MobiControl Compliance
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Accessory

Accessory	1.8M Power Cable with Fuse Kit 0.15M Power Converter Cable DC Jack Power Cable 150W Adapter with power cable Quick Start Guide	Optional Accessory	Stylus Kit + Screw 1.8M RS232 Cable 2M IP65 LAN Cable GPS & LTE 5M Combo Antenna (VM9C) GPS & LTE Magnetic Combo Antenna (VM10S) GPS Antenna WWAN Antenna 2M Waterproof USB Type-A to A Cable Cable Clamp Kit COM Port + CANBus Cable COM Port + DIDO Cable
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DIMENSIONS UNIT:MM



NOTE

1. This is a simplified drawing and some components are not marked in detail.
2. Please contact our sales representative if you need further product information.
3. All specifications are subject to change without prior notice.
4. 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.
5. COM port can supply 5V power via the 9th pin.