

FM10E-VML

10.4" Intel Atom® x6413E Vehicle Mounted Computer Defence Panel PC



KEY FEATURES

- Intel® Elkhart lake x6413E Processor
- 10.4" 1024 x 768 Panel with PCAP touch screen
- IP65 waterproof and dustproof
- Wide power input 10-60V DC with ignition
- Wide range operating temperature
- Support VESA Mount
- IO ports with Defence grade 38999 connectors
- Compliant with MIL-STD 810G/H and MIL-STD 461E/F/G

INTRODUCTION

Winmate VMC Defense Panel PC is a rugged and reliable solution tailored for military and defense applications. Powered by the Intel® Elkhart Lake x6413E processor, it is available in 10.4" and 12.1" panel sizes with PCAP touch screens for precise interaction. Built to withstand harsh environments, it features IP65-rated waterproof and dustproof protection, a wide 10-60V DC power input with ignition, and compliance with MIL-STD 810G/H and MIL-STD 461E/F/G standards. Equipped with defense-grade 38999 connectors and VESA mount support, it ensures secure and efficient operation in extreme conditions.

SPECIFICATIONS

Display

Resolution	1024x768	Size	10.4 inches
Contrast Ratio	1200:1	Panel Brightness	400 nits 800 nits(Optional)
View Angles	88,88,88,88	Type	Projected Capacitive Multi Touch

System Specification

Processor	Intel Atom x6413E 1.5GHz (up to 3GHz) Intel Atom x6425E 2GHz (up to 3GHz) (Optional)	Memory	1 x SO-DIMM, DDR4 3200 MHz, 4GB 8GB (Optional) 16GB (Optional)
Storage	1 x M.2 2242 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	4G/LTE (Optional)
GNSS	GPS/GLONASS (Optional)	Sensors	G-Sensor, Light Sensor ,Temp Sensor

Camera

Front Camera	2MP Camera
--------------	------------

Environment

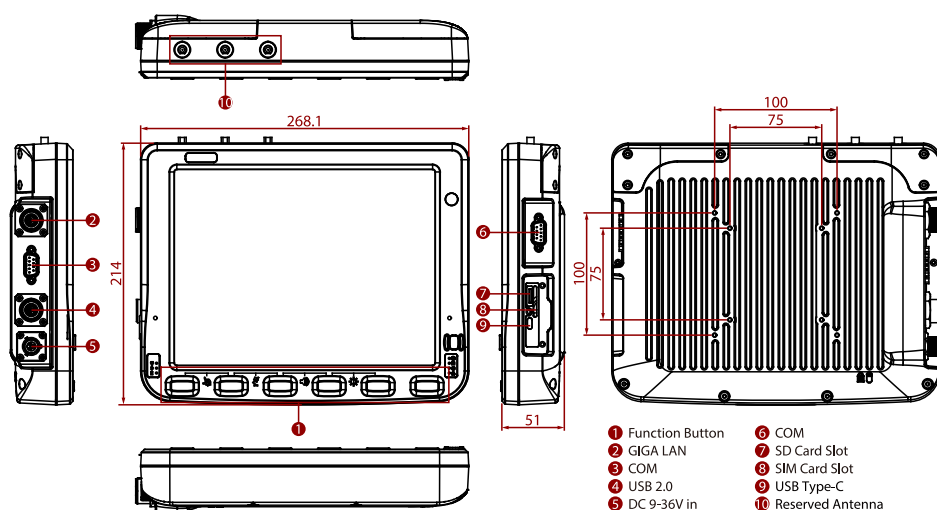
Operating Humidity	5% to 90% RH, Non-Condensing	Operating Temperature	-30°C to 60°C
Storage Temperature	-30°C to 60°C	Shock	USA: MIL-STD-810H Method 516.8 Procedure I NATO: STANAG 4370/AECTP400 Edition 3 Method AECTP 402-

Vibration	USA: MIL-STD-810H Method 514.8 Procedure I NATO: STANAG 4370/AECTP400 Edition 3 Method AECTP 401–Procedure I	IP rating	Procedure I IP65
Drop	USA: MIL-STD-810H Method 516.8, 4 ft NATO: STANAG 4370/AECTP400 Edition 3 Method AECTP 404 – Procedure II, 4 ft	Impact	Support EN62262 IK07 Rating
EMC	USA: MIL-STD-461G CE101, CE102, RE101, RE102, CS118 MIL-STD-461G CS101, CS114, CS115, CS116, RS101, RS103 (Optional) MIL-STD-461G RE102 Ground Army Grade NATO: STANAG 4370/AECTP501 NCE01, NCE02, NRE01, NRE02, NCS12 (Optional) STANAG 4370/AECTP501 NCS01, NCS07, NCS08, NCS09, NRS01, NRS02 (Optional) STANAG 4370/AECTP501 NRE02-2 Land Environment (Optional)	TEMPEST	USA: NSA NSTISSAM TEMPEST/192 (Optional) NATO: SDIP27 (Optional)
Certification			
Certification	CE, FCC FCC (Electromagnetic Emissions), IC (ICES-003) IEC/EN/UL 62368-1		
Compliance			
MIL-STD 461G	RE101 / RE102 CE101 / CE102 with EMI Glass / Touch(Optional) RS101 / RS 103 CS101 / CS 114 / CS 115 / CS 116		
Control			
Button	1 x Power Button, 6 x Function Button (Programmable Function Key Configured by Winset)		
IO Ports			
USB Port	1 x USB Type-C 1 x USB 2.0 Type-A (MIL-DTL-38999/3 connector)	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
LAN	1 x Gigabit LAN port (MIL-DTL-38999/1 connector)	Indicator	6 x LED Indicator (WLAN, BT, UPS battery, HDD, Screen Blanking, Heater)
Mechanical			
Dimension	268.1 x 214 x 51 mm	Weight	2.4kg
Mounting	VESA mount	Cooling System	Fanless Design
Security Function			
SOTI MobiControl	SOTI MobiControl Compliance		
Accessory			
Accessory	1 x Quick Start Guide 1 x Power Cable (MIL-DTL-38999/3) 1 x USB Cable (MIL-DTL-38999/3) 1 x LAN Cable (MIL-DTL-38999/3) 1 x 84W Power Adapter 1 x Power converter Cable	Optional Accessory	1.8M RS232 Cable GPS & LTE 2M Combo Antenna(VM240) GPS & LTE 5M Combo Antenna (VM9C) GPS & LTE Combo Antenna (VM10S) WWAN Antenna GPS Antenna
Power			
Battery	400mAh UPS Battery for 20 minutes backup (Optional)	Power Rating	10V~60V with ignition control (MIL-DTL-38999/1 connector)

DIMENSIONS UNIT:MM

NOTE

1. Total usable memory will be less dependent upon



actual system configuration.

2. SOTI is available upon request.

3. Length measurements do not include protrusions. Weight varies with options.

4. Measured at dimming LCD brightness. Varies depending on the usage conditions, or when an external device is attached.

5. Accessories may vary depending on your configuration.

6. This is a simplified drawing and some components are not marked in detail.

7. 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.