FM10E

10.4inch Mobile Computer Mounts with Intel® Elkhart lake x6413E

KEY FEATURES

- Intel® Elkhart lake x6413E Processor
- 10.4" 1024 x 768 Panel with PCAP touch screen mobile computer mounts
- Field replaceable front panel to reduce service costs
- IP65 waterproof and dustproof
- Wide range operating temperature

CE   FC   IP65   COMPLIANT MIL-STD 810G

OVERVIEW

Vibration and shock-proof design ensure reliable performance

When it comes to industrial usage, Winmate FM10E that is rugged enough to survive harsh environments is a must. Its solid enclosure proves the FM10E’s durability with MIL-STD-810G certification and IP65 rating.

PCAP Touch Screen

The FM10E features a compact panel with a PCAP touch screen. Resistant to dirt, debris, and highly sensitive touch commands make you enjoy every touch and convenience of using the device.
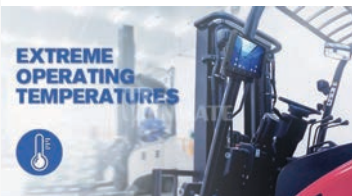
High-Performance CPU

To support the next generation of IoT edge devices, FM10E has developed a new line of processors enhanced for IoT—The Intel Elkhart Lake Series processors. These processors build on new levels of CPU, and graphics performances with integrated IoT features, real-time performance, manageability, security, and functional safety.

Windows 10 IoT Enterprise

Windows 10 IoT Enterprise is a full version of Windows 10 that delivers enterprise manageability and security to IoT solutions. Windows 10 IoT Enterprise shares all the benefits of the world-wide Windows ecosystem. It is a binary equivalent to Windows 10 Enterprise to use the same familiar development and management tools as client PCs and laptops.
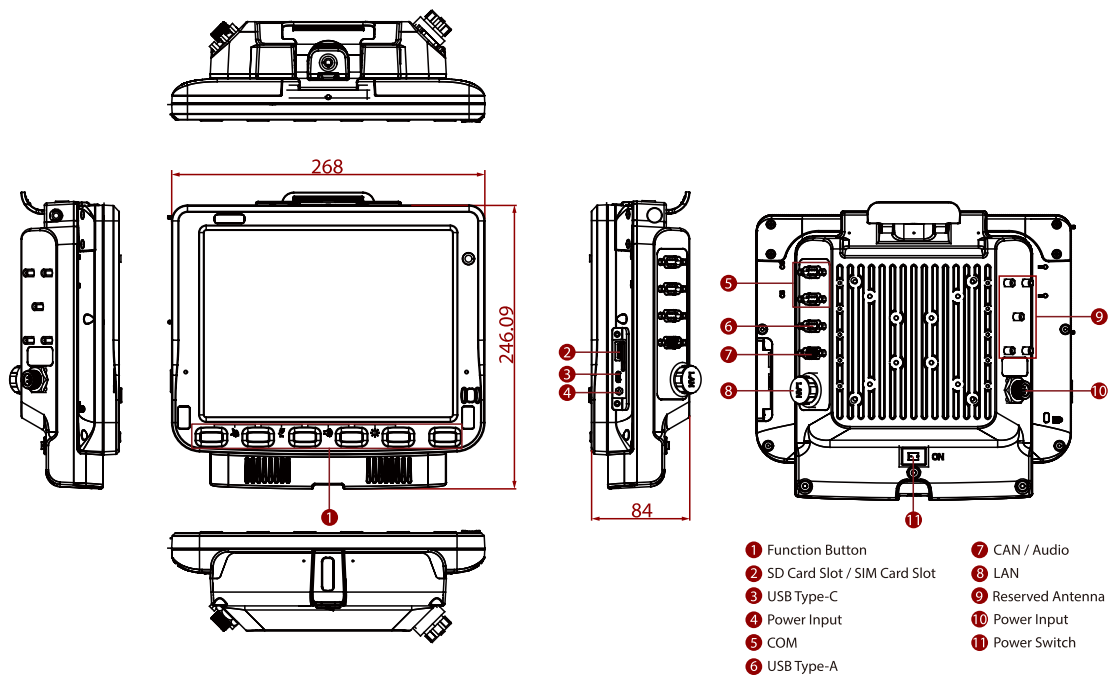
Reliable computing under extreme operating temperatures

Low-power components of industrial computers prevent overheating and are less likely to achieve high temperatures in the first place.

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
Touch Mode	Support Hand, Stylus, Glove Mode		

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)
Storage	1 x M.2 2242 SSD 128GB 256GB (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/AGPS	**Sensors**	G-Sensor, Light Sensor ,Temp Sensor

Camera

Front Camera	2MP Camera

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

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(Tablet) 1 x DB9 Connector for 2 x USB 2.0 Port(Docking)	**Serial Port**	2 x COM Port(Docking)
SD Card Slot	1 x Micro SD Card Slot(Tablet)	**SIM Card Slot**	1 x Dual-Nano SIM Card Slot
Audio	2 x Speaker(Docking) 1 x CANBus or 1 x Audio(Docking)	**LAN**	1 x Gigabit LAN port(Docking)
Indicator	6 x LED Indicator (WLAN, BT, UPS battery, HDD, Screen Blanking, Heater)	**Docking Connector**	SMA Connector(female) for external antenna WLAN SMA Connector(female) for external antenna GPS (Optional) SMA Connector(female) for external antenna WWAN (Optional)

Mechanical

Dimension	Tablet: 268 x 214 x 35 mm (10.6 x 8.42 x 1.37 inches) Docking: 202 x 245 x 52 mm (7.9 x 9.6 x 2.04 inches)	**Weight**	Tablet 1.7 kg (3.75 lbs) Docking 1.6 kg (3.53 lbs)
Mounting	RAM mount/ VESA mount	**Cooling System**	Fanless Design
Docking Housing	Aluminum Alloy Housing		

Security Function

SOTI MobiControl	SOTI MobiControl Compliance

Accessory

Accessory	5M Power Cable with Fuse Kit 0.3M USB Cable 0.15M Power Converter Cable DC Jack Power Cable 84W Adapter with power cable Cable Clamp Kit Wi-Fi Antenna x 2 Quick Start Guide External Antenna Fixing Bracket Dock + Latch Locking Key Stylus Kit + Screw	**Optional Accessory**	1.8M RS232 Cable 0.3M Audio Cable 1.8M CAN BUS Cable 1.8M CAN BUS Open Wire Cable 2M IP65 LAN Cable GPS & LTE 2M Combo Antenna(VM240) GPS & LTE 5M Combo Antenna (VM9C) Magnetic Combo Antenna (VM10S) WWAN Antenna

Power

Battery	7.6V UPS Battery (2S1P) Minimum 30 minutes	**Power Rating**	Docking: 10V-60V with ignition control Tablet: 12V DC In
Consumption	45W (Typical)		

DIMENSIONS UNIT:MM

268

246.09

84

① Function Button
② SD Card Slot / SIM Card Slot
③ USB Type-C
④ Power Input
⑤ COM
⑥ USB Type-A
⑦ CAN / Audio
⑧ LAN
⑨ Reserved Antenna
⑩ Power Input
⑪ Power Switch

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.
8. COM port can supply 5V power via the 9th pin.