

# FM10A, 10.4-inch Vehicle Mounted Computer

A Rugged Vehicle Mounted Computer for Data Collection in Warehouse and Logistics Applications

FM10A is a rugged vehicle mounted computer delivers flexibility and mobility in a vehicle-mount form factor, designed to easily be removed from the dock with a one-click top latch. Since the dock remains attached to the vehicle, this device can easily be moved or switched from one vehicle to another vehicle. FM10A designed to fit seamlessly into forklifts and other warehouse vehicles, will help minimize errors, streamline ordering and inventory management, and improve operational efficiencies.

The processing power comes from Freescale's Cortex A9 i.MX6 dual core processor. The computer features a brilliant projected capacitive touch screen, and offers 1024 x 768 pixel resolution.



## Highlights

- Freescale Cortex A9 i.MX6 Dual Core Processor
- 10.4" 1024 x 768 Panel with projected capacitive touch screen
- Field replaceable front panel to reduce service costs
- Magnesium alloy housing
- Built-in Wi-Fi and Bluetooth 4.0
- IP65 waterproof and dustproof
- Wide range operating temperature

Order Information			
	3G	4G	Heater
FM10A	Optional	Optional	N/A
FM10A-HT	Optional	Optional	Default

# FM10A, 10.4-inch Vehicle Mounted Computer

A Rugged Vehicle Mounted Computer for Data Collection in Warehouse and Logistics Applications

## Display Specification

Size	10.4-inch display (4:3)
Resolution	1024 x 768
Brightness	400 nit
Touch	Projected capacitive (p-cap) touch
Contrast Ratio	1200:1
Viewing Angle	88/88/88
Technology	• Light sensor

## System Specification

Processor	Freescale Cortex A9 i.MX6 Dual Core, 1.0 GHz
System Memory	1G LPDDR3 <sup>1</sup>
Storage	16GB eMMC
	Additional storage with SD card slot
Operating System	Android 6.0
	Ubuntu 16.04
	Kernel 3.10.52

## Wireless Communication

WLAN	802.11 a/b/g/n/ac
Bluetooth	Bluetooth 4.0
GPS	u-Blox Neo-6Q located on the Vehicle Dock
WWAN	Optional 4G/ LTE or 3G

## Interface

Computer	1 x SIM Card Slot 1 x SD Card Slot 1 x USB OTG 1 x 12V DC in power input jack
Docking	1 x COM 1, 1 x COM 2 1 x USB 2.0 port (support two USB 2.0) 1 x CANBus or 1 x Audio <sup>2</sup> 1 x 400Mbps LAN port Optional PoE as a Power sourcing equipment (PSE) support 802.3at Type 2 1 x Power connector SMA Connector(female) for external antenna (WiFi, GPS (optional), WWAN (optional))

## Keyboard and Input

Touch	• Projected capacitive (P-Cap), support stylus
Button	• On-screen QWERTY keyboard 1 x power, 6 x function key (Programmable function key configured by Hottab Utility)
LED Indicators	Wi-Fi, Bluetooth, UPS battery, HDD, Blanking, Heater

## Audio

Speaker	High power speaker (3W * 2), located on the docking
---------	-----------------------------------------------------

## Cameras

Web Camera	2MP webcam
------------	------------

## Security Function

Mobile Device Management	SOTI Mobicontrol compatible <sup>3</sup>
--------------------------	------------------------------------------

## Mechanical and Environment

Dimension (W x L x H)	Computer: 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) <sup>4</sup>
Weight	Computer 1.7 kg (3.75 lbs) Docking 1.6 kg (3.53 lbs)
Housing	Magnesium alloy housing
Cooling System	Fanless design
Operating Temperature	With optional heater : -30°C to 50°C (-22°F to 122°F) AC mode : -20°C to 50°C (-4°F to 122°F) Batter mode : -10°C to 50°C (14°F to 122°F)
Storage Temperature	-30°C to 60°C (-22° to 140°F)
Humidity	5% to 90% RH, non-condensing
IP Proof	IP65 certified, dustproof and waterproof
Impact	Support EN62262 IK70 rating
Shock	MIL-STD-810G Method 516.6 Procedure I
Vibration	MIL-STD-810G Method 514.6 Procedure I
ESD	Compliant with EN 61000-4-2, enhanced ESD to ±12kV direct & ±15kV air
Certifications	CE, FCC, UL60950-1, EN60950-1, PTCRB, FCC (Electromagnetic Emissions), IC (ICES-003)

## Power Management

Power Input	10V-60V, with isolation power and ignition control
UPS Battery	11.1V typ Battery (3S1P)
UPS Battery Operating Time	Minimum 30 minutes <sup>5</sup>

## Accessories

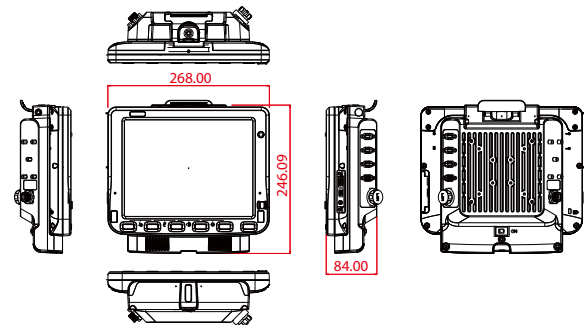
### Standard Accessories

Power Cable with Fuse	98K000A0006O
84 Watt Adapter	922D084W12V1
Power Converter Cable	94J602G030K2
USB Cable	9483098080K0
Wi-Fi Antenna (1 pcs)	39700000000G
External Antenna Fixing Bracket	88111T201203
Driver CD	9171111102L
Quick Start Guide	9152111101B

### Optional Accessories <sup>6</sup>

DC Power Jack Cable	94J0086020K0
120 Watt Adapter (for Heater Mode)	90PO12120005
RS232 Cable	94G3094090K2
Audio Cable	94E215R060K0
CAN Bus Cable	94E2150090K0
LAN Cable	94I0080080KF
Key for Vehicle Dock	9B000000007N
WWAN Antenna (1 pcs)	39700000000H
Fuse Kit	94JL01L01000
Device Mounting Kit 1 (No Drill)	98K000A0005Y
Device Mounting Kit 2 (Drill)	98K000A0006P
Mounting Kit 3 (Keyboard Mounting)	98K000A0005X
Magnetic Multi-Band Combo Antenna -VM10S	397SM0000006
LTE MIMO/GNSS- VM240	39700000000M
GPS & LTE MIMO Combo Antenna- VM9C	397SM0000008
Stylus Kit + Screw	98K000A0005T

### Drawing <sup>7</sup>



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

5. Measured at dimming LCD brightness. Varies depending on the usage conditions, or when an external device is attached.<sup>6</sup>

6. Accessories may vary depending on your configuration.

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



Do Not Expose the Battery Pack to Excessive Heat, or Extreme Heat (Near Fire, in Direct Sunlight for example)  
Do not expose bare skin to this product when handling this unit in extreme hot or cold environments

1. Total usable memory will be less depending upon actual system configuration.

2. CANBus and audio are mutually exclusive.

3. SOTI is available upon request.

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508

Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050

Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28

Business Registration Number: 07699660