

# FM12Q9

12.1" Android Vehicle Mounted Computer with Qualcomm® 6490



## KEY FEATURES

- Qualcomm® 6490, OctaCore, up to 2.7GHz
- 12.1" 1024 x 768 Panel with PCAP Touch, Android car mounted computer
- Field replaceable front panel to reduce service costs
- IP65 waterproof and dustproof vehicle mounted computer
- Wide range -30°C to 60°C operating temperature

## INTRODUCTION

Winmate FM Series Android Vehicle Mounted Computer (VMC) is a rugged and versatile solution designed for demanding industrial and logistics applications. Powered by Qualcomm® 6490 processors, it delivers reliable performance for forklift and fleet operations. Featuring an IP65-rated waterproof and dustproof design, a wide -30°C to 60°C operating temperature range, and a field-replaceable front panel to reduce service costs, the FM Series ensures durability and efficiency. Its built-in backup battery enables seamless dock-to-dock transitions, ensuring uninterrupted productivity.

## 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(Default)<br>800 (Optional) |
| View Angles    | 89,89,89,89                      |                  |                                     |

### System Specification

|           |                                         |                  |              |
|-----------|-----------------------------------------|------------------|--------------|
| Processor | Qualcomm® 6490, Octa-Core, up to 2.7GHz | Memory           | 8GB          |
| Storage   | 128GB                                   | Operating System | Android 15.0 |
| WLAN      | Support                                 | BT               | Support      |
| WWAN      | 4G (Optional)<br>5G (Optional)          | GNSS             | GPS/GLONASS  |
| Sensors   | G-Sensor, Temp. Sensor                  |                  |              |

### Camera

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

### Mechanical

|                 |                                                         |                |                                 |
|-----------------|---------------------------------------------------------|----------------|---------------------------------|
| Dimension       | Tablet: 307 x 225 x 41 mm<br>Docking: 202 x 245 x 52 mm | Weight         | Tablet 1.7 kg<br>Docking 1.6 kg |
| Mounting        | RAM mount/ VESA mount                                   | Cooling System | Fanless Design                  |
| Docking Housing | Aluminum Alloy Housing                                  |                |                                 |

### IO Ports

|                     |                                                                                |                          |                                                                                                                                                                                       |
|---------------------|--------------------------------------------------------------------------------|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>USB Port</b>     | 1 x USB 3.0 Type C (Tablet)<br>1 x DB9 Connector for 2 x USB 2.0 Port(Docking) | <b>Serial Port</b>       | 2 x COM Port(Docking)                                                                                                                                                                 |
| <b>SD Card Slot</b> | 1 x Micro SD Card Slot(Tablet)                                                 | <b>SIM Card Slot</b>     | 1 x Dual-Nano SIM Card Slot(Tablet)                                                                                                                                                   |
| <b>Audio</b>        | 2 x Speaker(Docking)<br>1 x CANBus or 1 x Audio(Docking)                       | <b>LAN</b>               | 1 x Gigabit LAN port(Docking)                                                                                                                                                         |
| <b>Indicator</b>    | 3 x LED Indicator<br>(WLAN, UPS battery, Heater)                               | <b>Antenna connector</b> | SMA Connector(female) for external antenna WLAN (Tablet)<br>SMA Connector(female) for external antenna GPS (Docking)<br>SMA Connector(female) for external WWAN/5G antenna (Optional) |

### Environment

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

### Certification

|                      |         |
|----------------------|---------|
| <b>Certification</b> | CE, FCC |
|----------------------|---------|

### Control

|               |                                                                                           |
|---------------|-------------------------------------------------------------------------------------------|
| <b>Button</b> | 1 x Power Button, 5 x Function Button<br>(Programmable Function Key Configured by Winset) |
|---------------|-------------------------------------------------------------------------------------------|

### Power

|                |                                               |                     |                                                                 |
|----------------|-----------------------------------------------|---------------------|-----------------------------------------------------------------|
| <b>Battery</b> | 7.6V UPS Battery (2S1P)<br>Minimum 30 minutes | <b>Power Rating</b> | Docking: 10V-60V with ignition control<br><br>Tablet: 12V DC In |
|----------------|-----------------------------------------------|---------------------|-----------------------------------------------------------------|

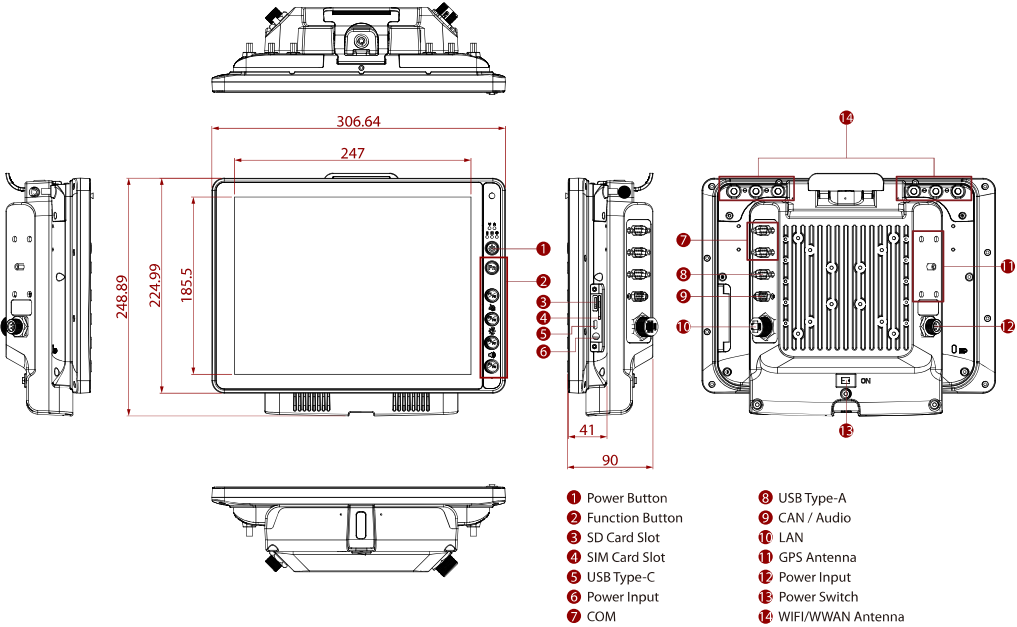
### Security Function

|                         |                             |
|-------------------------|-----------------------------|
| <b>SOTI MobiControl</b> | SOTI MobiControl Compliance |
|-------------------------|-----------------------------|

### Accessory

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

### 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.
- \* Some images or content on this page are created or enhanced using generative AI technology. All AI-generated content has been reviewed before publication.