FM12Q-V

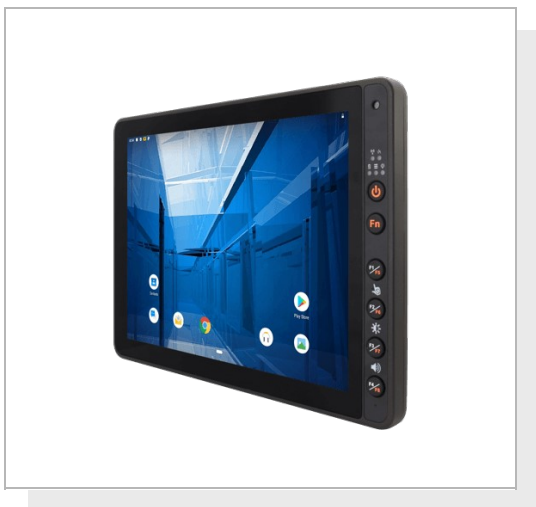## 12.1inch Android Vehicle Computer with Qualcomm Snapdragon™ 660

KEY FEATURES

- Qualcomm Snapdragon™ 660 octacore, 2.2 GHz CPU
- 12.1" 1024 x 768 Panel with PCAP Touch, Android vehicle computer
- IP65 waterproof and dustproof
- Wide power input 10-60V DC with ignition
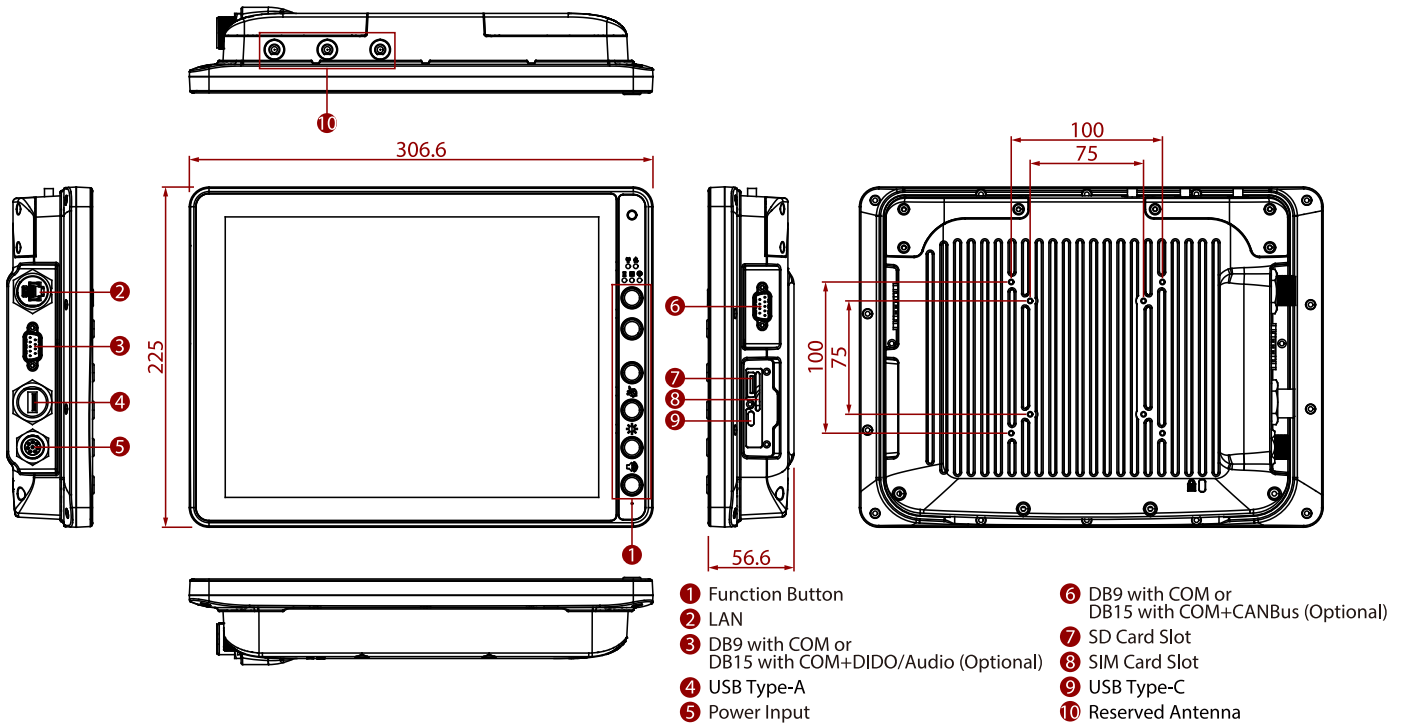- Wide range operating temperature
- Support VESA Mount

CE FC IP65 COMPLIANT MIL-STD 810H

SPECIFICATIONS

Display

Type	Projected Capacitive Multi Touch	**Touch Mode**	With Stylus Support With Gloves Support
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	Qualcomm® Snapdragon™ 660 (Octa-Core 2.2 GHz)	**Memory**	3GB
Storage	32GB	**Operating System**	Android 9.0
WLAN	Support	**BT**	Support
WWAN	4G/LTE (Optional)	**GNSS**	GPS/GLONASS (Optional)
Sensors	G-Sensor, Temp. Sensor		

Camera

Front Camera	2MP Camera

Mechanical

Dimension	307 x 225 x 57 mm	**Weight**	2.5 kg
Mounting	RAM Mount/ VESA Mount	**Cooling System**	Fanless Design

IO Ports

USB Port	1 x USB 3.0 Type C (OTG) 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 or Line Out) either one with DIDO (Optional)	**LAN**	1 x Gigabit LAN port PSE (IEEE 802.3at 30W) (Optional)
Indicator	3 x LED Indicator (WLAN, UPS battery, Heater)	**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 50°C
Storage	-30°C to 60°C	**Shock**	MIL-STD-810H Method 516.8 Procedure I

Temperature			
Vibration	MIL-STD-810H Method 514.8 Procedure I	IP rating	IP65, Compliance IEC60592
Impact	Support EN62262 IK07 Rating	ESD	Compliant with EN 61000-4-2, Enhanced ESD to ±8kV Direct & ±15kV Air

Certification

Certification	CE, FCC

Control

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

Power

Battery	400mAh UPS Battery for 20 minutes backup (Optional)	Power Rating	10V~60V with ignition control

Security Function

SOTI MobiControl	SOTI MobiControl Compliance

Accessory

Accessory	5M Power Cable with Fuse Kit 0.15M Power Converter Cable DC Jack Power Cable 84W Adapter with power cable Quick Start Guide	Optional Accessory	Stylus Kit + Screw 1.8M RS232 Cable 2M IP65 LAN Cable GPS & LTE 2M Combo Antenna(VM240) 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

DIMENSIONS   UNIT:MM

❶ Function Button
❷ LAN
❸ DB9 with COM or DB15 with COM+DIDO/Audio (Optional)
❹ USB Type-A
❺ Power Input
❻ DB9 with COM or DB15 with COM+CANBus (Optional)
❼ SD Card Slot
❽ SIM Card Slot
❾ USB Type-C
❿ Reserved Antenna

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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. The UPS battery is only expected to use for backup under low system loading and without I/O function.
9. COM port can supply 5V power via the 9th pin.