

# AR-V6100FL

Fanless In-Vehicle system, Intel Core i5/i7 + HM65 with smart power onboard, GPS/3.5G/WiFi/Bluetooth option



## Features

- Intel Celeron, Core i5 up to i7 Quad-core Processor
- One CAN 2.0A/2.0B Interface
- 1-Wire i-Button interface for Driver ID and Sensors
- 4 x Digital Inputs and 4 Digital Outputs
- VGA/HDMI/DVI Dual Independent Video Outputs
- External Removable Anti-Vibration/Shock Disk Bay and CF socket
- Internal 3.5G, GPS, WiFi, Bluetooth Modules (Optional)
- Combo connector to simplify touch monitor installation



## Specification

### System

<b>CPU</b>	Intel Core i7 2710QE / i5 2510E / Celeron B810
<b>Chipset</b>	Intel HM65
<b>Memory</b>	2 x 204-pin SO-DIMM DDR3 2GB DDR3 pre-installed, up to 8GB

### Video

<b>Graphic Controller</b>	Integrated within HM65
<b>Video Memory</b>	DVMT 4.0
<b>Video Interface</b>	<ul style="list-style-type: none"> <li>● 1 x HDMI type A connector</li> <li>● 1 x DVI-D connector</li> <li>● 1 x dedicated combo connector (VGA/USB/audio/power)</li> </ul>

### Storage

<b>SATA</b>	2 x SATA III port with SATA III power connector
<b>CF</b>	1 x Compact Flash Type I/II slot support UDMA 33
<b>Disk Bay</b>	1 x swappable 2.5" HDD bay with Anti-vibration / Anti-shock solution

### I/O

<b>Expansion Slot</b>	2 x miniPCIe (For Optional 3.5G / Wifi module only)
<b>Ethernet</b>	2 x Gbps Intel GbE chip via RJ-45 connector
<b>USB</b>	6 x USB2.0 (4 x external port, 2 x JST pin header)
<b>Serial Port</b>	<ul style="list-style-type: none"> <li>● 2 x RS232 (1 x DB9, 1 x pin header)</li> <li>● 1 x RS232/422/485 (DB9, switch selectable)</li> </ul>
<b>GPIO</b>	8-bit GPIO (4 In, 4 Out)
<b>Antenna Hole</b>	1 x SMA for GPS, 1 x SMA for 3.5G, 2 x SMA for WiFi, 1 x SMA for Bluetooth
<b>SIM</b>	SIM Slot x 1, SIM card changeable without opening case
<b>iButton</b>	1-Wire interface for driver ID and sensors
<b>CAN BUS</b>	Support CAN 2.0A/2.0B protocol

### Others

<b>Audio</b>	Audio Codec (Line-out & MIC)
<b>Hardware Monitoring</b>	CPU voltage and temperature
<b>WatchDog Timer Indicator</b>	Software programmable 1~255 sec Power / HDD/ Stauts LED

### Software

<b>OS Support</b>	Windows XP, Windows 7, Fedora 14, Ubuntu 10
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### Power

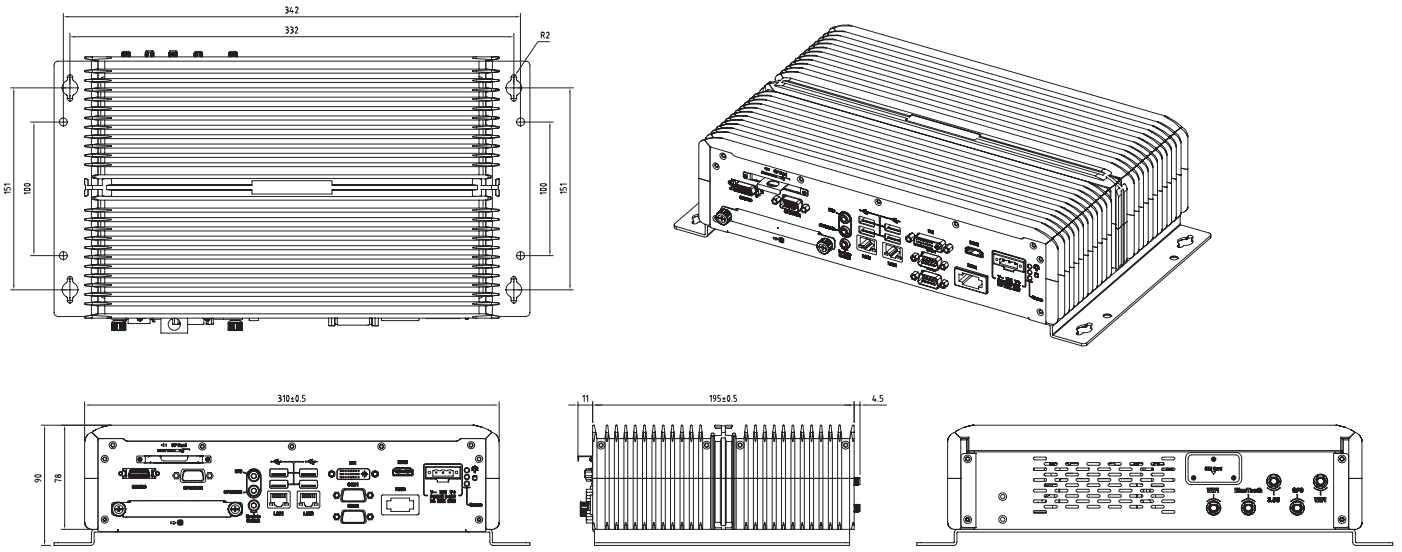
<b>Control</b>	<ul style="list-style-type: none"> <li>● Ignition or ignition and remote switch</li> <li>● Software Programmable On/OFF delay time</li> </ul>
<b>Monitor</b>	Programmable Low Voltage Input threshold for automatically shut down
<b>Indicator</b>	Status LED for easy diagnostic
<b>Safety</b>	ISO-7637-2, E-Mark Certification
<b>Power Input</b>	9~32 V (+/-5%) single voltage input, 3 poles terminal block
<b>Power Consumption</b>	Max 80W (i7 CPU)

### Mechanical & Environment

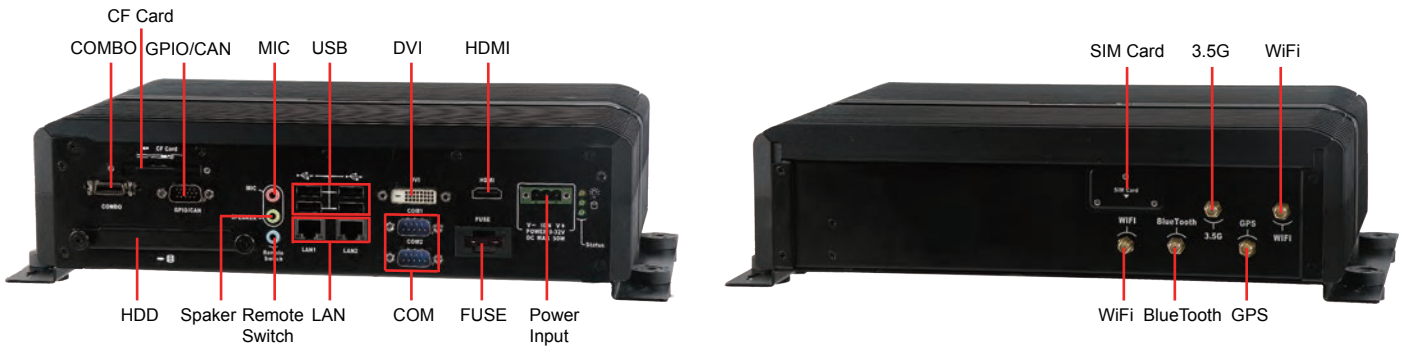
<b>Thermal Design</b>	Fanless
<b>Chassis Material</b>	SECC + Aluminum heatsink
<b>Vibration</b>	IEC 60068-2-64, 5~500Hz, 3GRMS(CF/SSD), Operating with SSD
<b>Shock</b>	IEC 60068-2-27, 50G 500m/s <sup>2</sup> 11MS, Operating with SSD
<b>Dimension</b>	310mm x 195mm x 80mm
<b>Weight</b>	6 kg
<b>Operating Temp.</b>	-20~60°C (-4~140°F)
<b>Storage temp.</b>	-40~80°C (-40~176°F)
<b>Relative Humidity</b>	0 ~ 90% @ 40°C, non-condensing
<b>Safety</b>	CE, FCC class B, E-Mark

### Optional Modules

<b>GPS</b>	u-blox 5 chip, 2.5 meter accuracy
<b>3.5G</b>	Sierra MC8790, UMTS/HSPA and quad-band GSM/GPRS/EDGE
<b>WiFi</b>	802.11 b/g/n, supports client and access point modes
<b>Bluetooth</b>	Bluetooth 2.1 + Enhanced Data Rate (EDR)



**I/O Connectors**



**Packing List**

- 1 x AR-V6100FL
- 1 x User Guide & System Driver CD
- 1 x Screw pack(2.5" HDD bracket: 4pcs)
- 1 x Terminal block female 3pin x 1
- 1 x Spare Fuse 10A
- 1 x SATA & SATA power cable
- 1 x Remote Switch Cable
- 1 x One-to-One VGA Combo Cable
- 1 x GPIO/CAN/Driver ID DB15 Connector

**Ordering Information**

<b>AR-V6100FLCM</b>	AR-V6100FL with Intel Celeron B810 1.6GHz, 2M cache
<b>AR-V6100FLI5</b>	AR-V6100FL with Intel Core i5 2510E 2.50GHz, 3M cache
<b>AR-V6100FLI7</b>	AR-V6100FL with Intel Core i7 2710QE 2.10GHz, 6M cache

**Optional (Purchase Separately)**

<b>100070047</b>	1 x Sierra MC8790 3.5G module with RF cable, Cable Antenna
<b>100070053</b>	1 x Huawei EM770W 3.5G module with RF cable, Cable Antenna
<b>100070067</b>	1 x Wieson G5020-1 GPS module with RF Cable ,Cable Antenna (L=5M)
<b>100070068</b>	1 x SparkLAN WPER-150GN WiFi module with RF Cable, Antenna x 2
<b>100070065</b>	1 x Qcom QBTM400-01 bluetooth module with RF Cable, Antenna
<b>100070066</b>	1 x 2G DDRIII SODIMM module with DDRIII's heatsink