

# AR-V6100FL

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



## Features

- Rugged fanless design
- Support Intel 2nd generation Core i processors with HM65 chipset
- 2 x DDR3 SO-DIMM, up to 8GB
- Support CAN 2.0A/2.0B protocol and i-Button for driver ID
- VGA/HDMI/DVI-D output
- Variety Wireless Communication
- Combo connector to simplify touch monitor installation



## Specification

### System

|         |   |
|---------|---|
| CPU     | Intel Core i7 2710QE / i5 2510E / Celeron B810                |
| Chipset | Intel HM65  |
| Memory  | 2 x 204-pin DDR3-1333 SO-DIMM<br>2GB pre-installed, up to 8GB |

### Video

|                    |   |
|--------------------|---|
| Graphic Controller | Integrated within processors  |
| Video Memory       | DVMT  |
| Video Interface    | 1 x HDMI type A connector<br>1 x DVI-D connector<br>1 x dedicated combo connector (VGA/USB/audio/power) |

### Storage

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

### Communication

|             |   |
|-------------|---|
| Ethernet    | 2 x Intel GbE chip via RJ-45 connector                  |
| USB         | 4 x USB 2.0   |
| Serial Port | 1 x RS232<br>1 x RS232/422/485 (DB9, switch selectable) |

### I/O

|                |   |
|----------------|---|
| Expansion Slot | 2 x Mini PCIe (For Optional 3.5G / Wifi module only)                          |
| GPIO           | 8-bit GPIO (4 In, 4 Out)  |
| Antenna Hole   | 1 x SMA for GPS, 1 x SMA for 3.5G, 2 x SMA for WiFi,<br>1 x SMA for Bluetooth |
| SIM            | SIM Slot x 1, SIM card changeable without opening case                        |
| iButton        | 1-Wire interface for driver ID and sensors                                    |
| CAN Bus        | Support CAN 2.0A/2.0B protocol  |

### Software

|            |   |
|------------|---|
| OS Support | Windows XP, Windows 7, Fedora 14, Ubuntu 10 |
|------------|---|

## Others Feature

|                  |                                  |
|------------------|----------------------------------|
| Audio            | Audio Codec (Line-out & MIC)     |
| Hardware Monitor | CPU voltage and temperature      |
| WatchDog Timer   | 1~255 sec. software programmable |
| Indicator        | Power/HDD/Status LED             |

## Power Requirement

|                   |   |
|-------------------|---|
| Power Input       | 9~32 V (+/-5%) single voltage input,<br>3 pole terminal block |
| Power Consumption | Max 80W (i7 CPU)  |

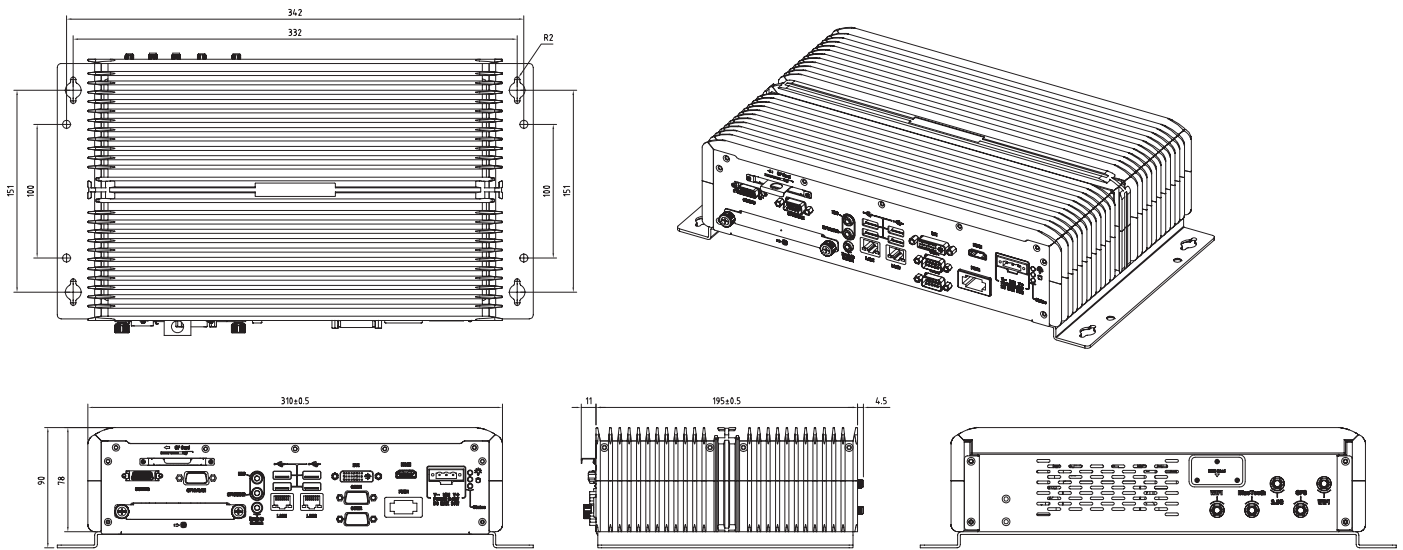
## Mechanical & Environment

|                   |   |
|-------------------|---|
| Thermal Design    | Fanless   |
| Chassis Material  | Metal SPGC  |
| Vibration         | IEC 60068-2-64, 5~500Hz, 3Grms(CF/SSD),<br>Operating with SSD |
| Shock             | IEC 60068-2-27, 50G 11ms,<br>Operating with SSD               |
| Dimension         | 310mm x 195mm x 80mm  |
| Weight            | 6 kg  |
| Operating Temp.   | 0~60°C (32~140°F)   |
| Storage temp.     | -40~80°C (-40~176°F)  |
| Relative Humidity | 0~90% @ 40°C, non-condensing                                  |
| Safety            | CE, FCC class B, E-Mark                                       |

## Smart In-Vehicle Power Management

|                               |   |
|-------------------------------|---|
| O/S Anti-Crash                | Smart O/S boot/shut-down control by power subsystem   |
| System boot / Shut-down delay | Delay time from 0 seconds to 60 minutes setting in BIOS   |
| System boot fail retry        | 3 times boot fail retry   |
| Power on/off switches         | • System power switch by remote cable switch<br>• System power input serial connection to car battery and ignition switch |
| Car battery protection        | Low battery voltage monitoring and configurable auto shutdown low battery voltage level                                   |

## Dimension



## 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 Remote Switch Cable
- 1 x GPIO/CAN/Driver ID DB15 Cable
- 1 x One to Many Combo Cable

## Ordering Information

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

## Optional Modules

|           |  |
|-----------|--|
| 100070067 | Wieson G5020-1 GPS module with RF Cable, Cable Antenna (L=5M)          |
| 100070066 | Qcom QBTM400-01, RF Cable, Antenna                                     |
| 100070075 | Sierra MC8705 with RF cable, Cable Antenna                             |
| 100070086 | Intel Centrino N6205 802.11 a/b/g/n WiFi module, RF Cable, Antenna x 2 |