***Vehicle Surveillance System***

**IVS-300**

# *Features*



* Intel® Skylake ULT /Baytrail processor
* 4 x PoE IEEE802.3af
* Optional 3G/Wi-Fi
* 2 x RS-232, 1 x RS-422/485
* 4 x DI/DO
* 1 x HDMI (lockable), 1 x VGA



Fanless



PoE

# *Specifications*



3.75G/HSUPA

GPS

Wi-Fi

OBD-II

**E**

E-Mark

|  |  |  |  |
| --- | --- | --- | --- |
| **Model Name** | | **IVS-300-BT** | **IVS-300-ULT3** |
| **Chassis** | **Color** | Blue C | Blue C |
| **Dimensions (WxHxD) (mm)** | 255 x 80 x 185 | 255 x 80 x 185 |
| **System Fan** | Fanless | Fanless |
| **Chassis Construction** | Extruded aluminum alloy | Extruded aluminum alloy |
| **Motherboard** | **CPU** | Intel® Celeron® J1900 Processor (quad-core 2GHz, 10W TDP) | Intel® Core™ i5-6300U processor (dual-core, 2.4 GHz, 15W TDP) |
| **Chipset** | SoC |  |
| **System Memory** | 2 x 204-pin DDR3L SO-DIMM.  4GB pre-installed (system max. 8 GB) | 2 x 260-pin DDR4 SO-DIMM,  4GB pre-installed (system max. 32 GB) |
| **Storage** | **Hard Drive** | 2 x 2.5'' SATA 6Gb/s SSD removable drive bay | 2 x 2.5'' SATA 6Gb/s SSD removable drive bay |
| **Communication** | **WLAN** | PCIe Mini Wi-Fi 802.11 a/b/g/n/ac (optional) | PCIe Mini Wi-Fi 802.11 a/b/g/n/ac (optional) |
| **Bluetooth** | BT 4.0/3.0+HS (combo with WLAN optional module) | BT 4.0/3.0+HS (combo with WLAN optional module) |
| **WWAN** | PCIe Mini WCDMA/HSDPA/HSUPA (optional) | PCIe Mini WCDMA/HSDPA/HSUPA (optional) |
| **GPS** | On board GPS | On board GPS |
| **I/O Interfaces** | **USB 3.1 Gen 1** | 2 | 2 |
| **Ethernet** | 4 x RJ-45 PCIe GbE by Intel® i210-AT  Support PoE IEEE802.3af (Each port max 15.4W) | 4 x RJ-45 PCIe GbE by Intel® i210-AT  Support PoE IEEE802.3af (Each port max 15.4W) |
| **COM port** | 2 x DB-9 RS-232(With isolation) 1 x DB-15 RS-422/485 | 2 x DB-9 RS-232(With isolation) 1 x DB-15 RS-422/485 |
| **Digital I/O** | 8-bit digital I/O (4-bit input, 4-bit output) | 8-bit digital I/O (4-bit input, 4-bit output) |
| **CAN-Bus/OBD-II** | 1 x DB9 OBD-II/J1939 | 1 x DB9 OBD-II/J1939 |
| **Display** | 1 x VGA, 1 x HDMI | 1 x VGA, 1 x HDMI |
| **Resolution** | VGA : Up to 1920 x 1080 @60Hz HDMI : Up to 1920 x 1080 @60Hz | VGA : Up to 1920 x 1080 @60Hz HDMI : Up to 1920 x 1080 @60Hz |
| **Audio** | 1 x Mic in, 1 x Line out | 1 x Mic in, 1 x Line out |
| **SIM** | 2 x on board SIM card slot | 2 x on board SIM card slot |
| **Antenna** | 1 x 3G, 1 x GPS, 1 x BT, 1 x Wi-Fi | 1 x 3G, 1 x GPS, 1 x BT, 1 x Wi-Fi |
| **Expansions** | **PCIe Mini** | 1 x Half-size PCIe Mini (reserved for WLAN) 1 x Full-size PCIe Mini (reserved for WWAN) 1 x Full-size PCIe Mini (USB signal) | 1 x Half-size PCIe Mini (reserved for WLAN) 1 x Full-size PCIe Mini (reserved for WWAN) 1 x Full-size PCIe Mini (USB signal) |
| **Led Indicator & Button** | **Indicator** | 8 x LED (4 PoE, 1 HDD, 1 Wi-Fi, 2 SIM) | 8 x LED (4 PoE, 1 HDD, 1 Wi-Fi, 2 SIM) |
| **Button** | 1 x Power button | 1 x Power button |
| **Power** | **Power Input** | Cigarette lighter power cable: DC 9 V~30 V | Cigarette lighter power cable: DC 9 V~30 V |
| **Consumption** | 12 V @ 12A  (Intel® J1900 with 4 GB DDR3L memory + 4 PoE) | 12 V @ 14A  (Intel® i5-6300U with 4 GB DDR4 memory + 4 PoE) |
| **Reliability** | **Mounting** | Wall mount | Wall mount |
| **Operating Temperature** | -20°C ~ 60°C with air flow | -20°C ~ 60°C with air flow |
| **Storage Temperature** | -30°C ~ 70°C | -30°C ~ 70°C |
| **Humidity** | 10% ~ 95%, non-condensing | 10% ~ 95%, non-condensing |
| **Operating Shock** | Half-sine wave shock 5G, 11ms, 3 shocks per axis | Half-sine wave shock 5G, 11ms, 3 shocks per axis |
| **Operating Vibration** | MIL-STD-810F 514.5C-2 (with SSD) | MIL-STD-810F 514.5C-2 (with SSD) |
| **Weight (Net/Gross)** | 3kg/4.5kg | 3kg/4.5kg |
| **Safety/EM C** | CE / FCC / E-Mark | CE / FCC / E-Mark |
| **OS** | **Supported OS** | Microsoft® Windows® Embedded 8, Microsoft® Windows® Embedded Standard 7 E | Microsoft® Windows® Embedded 8, Microsoft® Windows® Embedded Standard 7 E |

# *Fully Integrated I/O*

***Front view Rear view***

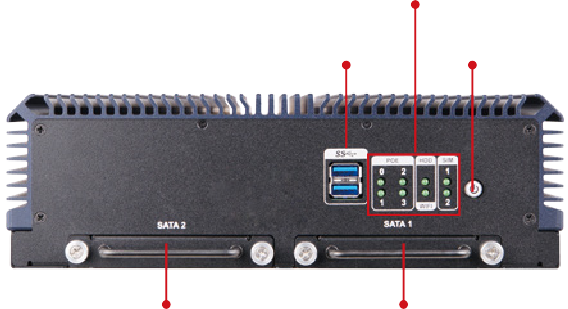
LED Indicators:

PoE, HDD, Wi-Fi, SIM

2 x RS-232

Bluetooth Antenna 4 x PoE

3G Antenna

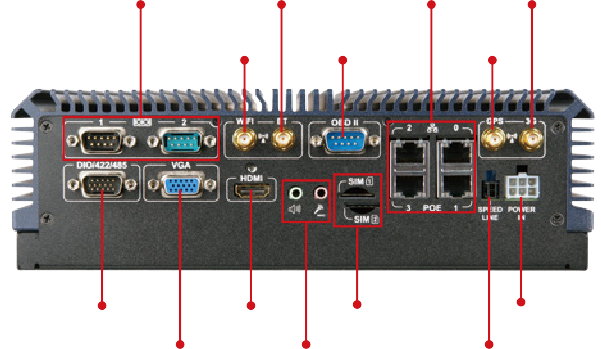


2 x USB 3.1

Gen 1

Power Switch

2.5" HDD/SSD Drive Bay 2.5" HDD/SSD Drive Bay



Wi-Fi Antenna

OBD-II

GPS

Antenna

DIO/RS-422/485

HDMI

2 x SIM

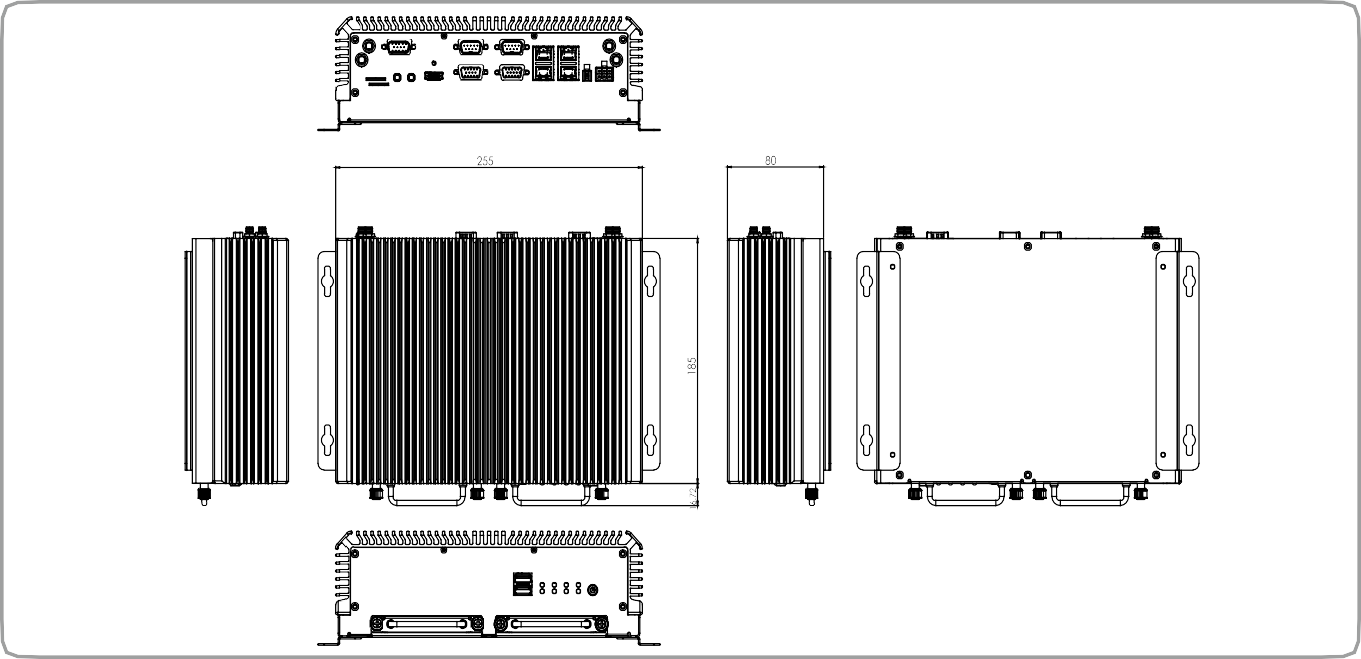
Power In

***Dimensions (Unit: mm)***

VGA

Audio

Speed Line



***IVS-300-ULT3***

# *Ordering Information*

|  |  |
| --- | --- |
| **Part No.** | **Description** |
| **IVS-300-BT-J1/4G-R10** | Fanless embedded system with Intel® Celeron® Processor J1900 (10W) Processor with 4GB DDR3L pre-installed memory, PoE, on board GPS, HDMI,  VGA, two 2.5" removable SATA HDD bay, RoHs |
| **IVS-300-ULT3-i5/4G-R10** | Fanless embedded system with 6th generation 14nm Intel® Core™ i5-6300U (15W) mobile processor (ULT) with 4GB DDR4 pre-installed memory,  PoE, on-board GPS, HDMI, VGA, two 2.5" removable SATA HDD bay, RoHs |

***Options***

|  |  |
| --- | --- |
| **Part No.** | **Description** |
| **IVS-300-ULT3-WES7E64-R10** | OS Image with Windows® Embedded Standard 7 E 64-bit for IVS-300-ULT3, with DVD-ROM, RoHS |
| **IVS-300-BT-WES7E64-R10** | OS Image with Windows® Embedded Standard 7 E 64-bit for IVS-300-BT, with DVD-ROM, RoHS |
| **IVS-WIFI-KIT02-R10** | 1T1R Wi-Fi module kit for embedded system, IEEE802.11a/b/g/n/ac Wi-Fi with Bluetooth 4.0/3.0+HS, 1 x Wi-Fi module, 1 x Antenna, RoHS |
| **IVS-3G-KIT02-R10** | 3G module kit for embedded system, F260, 1 x 3G module, RoHs |
| **IVIPOWER-6PIN-R10** | Power adapter with 6-pin transfer cable, RoHS |

***Packing List***

|  |  |  |  |
| --- | --- | --- | --- |
| **Item** | **Part No.** | **Qty** | **Description** |
| **Wall Mount Kit** | 41020-0432C2-00-RS | 2 | Wall mount bracket |
| **Power Cable** | 32002-007200-101-RS | 1 | Round cable, power cable, 1, 3000mm, 18AWG, (A) MOLEX 5557-0600 P=4.2, H.S.TUBE x 2, Label: GND x 3 + VIN x 2 + ACC, RoHS |
| **GPS/GSM Antenna** | 32506-000100-100-RS | 1 | Integration antenna, GPS/GSM, RG 174, 5000mm/5000mm, PPF-5423SA5X-999, Magnetic mount:  φ55x22mm, 1575.42MHz/850MHz/900MHz/1800MHz/1900MHz, SMA plug x 2 |
| **Screw pack** | 44015-030053-RS | 8 | Screw pack |
| 44005-030061-RS | 6 | Screw pack |