

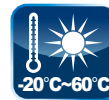
# IVS-200-ULT2

## Vehicle Surveillance System



### Features

- Intel® i5-5350U dual-core 1.8 GHz CPU or Intel® Celeron® 3755U dual-core 1.7 GHz CPU
- Four Intel® GbE LAN ports
- 9 V ~ 36 V DC input
- Two RS-232/422/485
- E-Mark certification

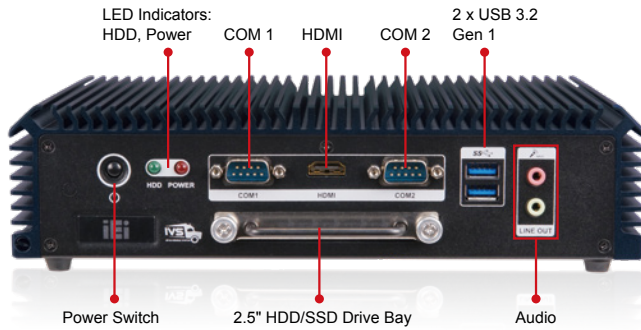


### Specifications

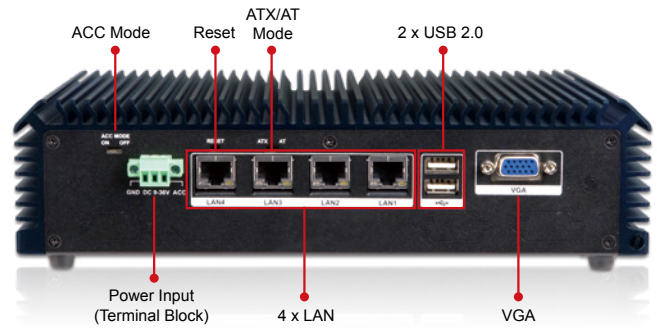
| Model Name            |                                                  | IVS-200-ULT2                                                                                                                                            |                                                                                 |
|-----------------------|--------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Chassis               | Color                                            | Blue C                                                                                                                                                  |                                                                                 |
|                       | Dimensions (WxHxD) (mm)                          | 255 x 63 x 150                                                                                                                                          |                                                                                 |
|                       | System Fan                                       | Fanless                                                                                                                                                 |                                                                                 |
|                       | Chassis Construction                             | Extruded aluminum alloy                                                                                                                                 |                                                                                 |
| Motherboard           | CPU                                              | Intel® Core™ i5-5350U Processor (dual-core, 1.8 GHz, 15W TDP) or Intel® Celeron® 3765U Processor (dual-core, 1.9 GHz, 15W TDP)                          |                                                                                 |
|                       | Chipset                                          | SoC                                                                                                                                                     |                                                                                 |
|                       | System Memory                                    | 2 x 204-pin DDR3L SO-DIMM slot<br>4 GB pre-installed (system max. 16 GB)                                                                                |                                                                                 |
| Storage               | Hard Drive                                       | 1 x 2.5" SATA 6Gb/s HDD/SSD removable drive bay                                                                                                         |                                                                                 |
|                       | mSATA                                            | 1 x mSATA (SATA 6Gb/s)                                                                                                                                  |                                                                                 |
| Communication         | WLAN                                             | PCIe Mini Wi-Fi 802.11b/g/n (optional)                                                                                                                  |                                                                                 |
|                       | Bluetooth                                        | Bluetooth 2.1 (combined with optional WWAN module)                                                                                                      |                                                                                 |
|                       | WWAN                                             | PCIe Mini WCDMA/HSDPA/HSUPA (optional)                                                                                                                  |                                                                                 |
| I/O Interfaces        | USB 3.2 Gen 1                                    | 2                                                                                                                                                       |                                                                                 |
|                       | USB 2.0                                          | 2                                                                                                                                                       |                                                                                 |
|                       | Ethernet                                         | 4 x RJ-45 connector<br>LAN1: PCIe GbE by Intel® I218<br>LAN2: PCIe GbE by Intel® I211<br>LAN3: PCIe GbE by Intel® I211<br>LAN4: PCIe GbE by Intel® I211 |                                                                                 |
|                       |                                                  | COM Port                                                                                                                                                | 2 x DB-9 RS-232/422/485<br>4 x DB-9 RS-232 (optional)                           |
|                       |                                                  | Display                                                                                                                                                 | 1 x VGA, 1 x HDMI                                                               |
|                       |                                                  | Resolution                                                                                                                                              | VGA: up to 2560 x 1600 @ 60 Hz<br>HDMI: up to 3840 x 2160 @ 60 Hz               |
|                       | DIO                                              | 8-bit digital I/O (4-bit input, 4-bit output) (optional)                                                                                                |                                                                                 |
|                       | SIM                                              | 1 x On-board SIM card slot                                                                                                                              |                                                                                 |
|                       | Antenna                                          | 1 x 3G, 1 x BT, 1 x Wi-Fi                                                                                                                               |                                                                                 |
|                       | Audio                                            | 1 x Line out, 1 x Mic in                                                                                                                                |                                                                                 |
|                       | Expansions                                       | PCIe Mini                                                                                                                                               | 1 x Full-size (reserved for WWAN or mSATA)<br>1 x Full-size (reserved for WLAN) |
|                       |                                                  | Power Input                                                                                                                                             | DC jack : 9 V~36 V DC                                                           |
|                       | Power                                            | Consumption                                                                                                                                             | 12 V @ 2.1 A (Intel® i5-5350U with 4 GB DDR3 memory)                            |
|                       |                                                  | Reliability                                                                                                                                             | Mounting                                                                        |
| Operating Temperature | -20°C ~ 60°C with air flow (SSD)                 |                                                                                                                                                         |                                                                                 |
| Storage Temperature   | -30°C ~ 70°C                                     |                                                                                                                                                         |                                                                                 |
| Humidity              | 10% ~ 95%, non-condensing                        |                                                                                                                                                         |                                                                                 |
| Operating Shock       | Half-sine wave shock 5G, 11ms, 3 shocks per axis |                                                                                                                                                         |                                                                                 |
| Operating Vibration   | MIL-STD-810F 514.5C-2 (with SSD)                 |                                                                                                                                                         |                                                                                 |
| Weight (Net/Gross)    | 2.2 kg/3 kg                                      |                                                                                                                                                         |                                                                                 |
| Safety/EMC            | CE/FCC/E-Mark                                    |                                                                                                                                                         |                                                                                 |
| OS                    | Supported OS                                     | Microsoft® Windows® Embedded 8, Microsoft® Windows® Embedded Standard 7 E                                                                               |                                                                                 |

## Fully Integrated I/O

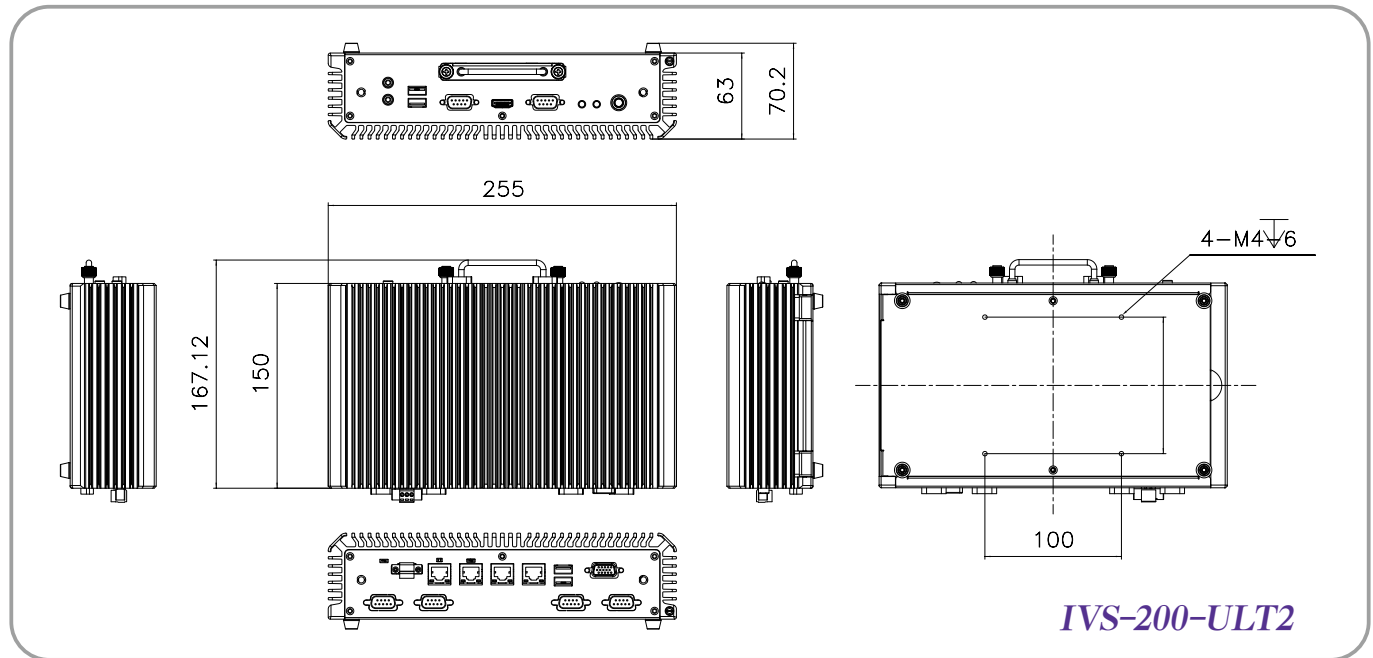
### Front view



### Rear view



### Dimensions (Unit: mm)



IVS-200-ULT2

### Ordering Information

| Part No.               | Description                                                                                                                                                                                                    |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IVS-200-ULT2-I5/4G-R11 | Fanless system with Intel® Core™ i5-5350U CPU, up to 2.9GHz, TDP 15W, four GbE LAN ports, one HDMI, one VGA, two RS-232/422/485, one 2.5" removable SATA HDD bay, 4 GB memory pre-installed, 9 V~36 V DC, RoHS |
| IVS-200-ULT2-C/4G-R11  | Fanless system with Intel® Celeron® 3765U 1.7GHz CPU, TDP 15W, four GbE LAN ports, one HDMI, one VGA, two RS-232/422/485, one 2.5" removable SATA HDD bay, 4 GB memory pre-installed, 9 V~36 V DC, RoHS        |

### Options

| Item         | Part No.                 | Description                                                                                                                                           |
|--------------|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| OS           | IVS-200-ULT2-WES7E64-R10 | OS image with Windows® Embedded Standard 7 E 64-bit for IVS-200-ULT2, DVD-ROM, RoHS                                                                   |
| Serial cable | 32205-005400-100-RS      | RS-232 cable, 150 mm, 2x5 pin                                                                                                                         |
| DIO cable    | 32231-000100-200-RS      | DIO cable, 150 mm, 2x5 pin                                                                                                                            |
| Wireless kit | EMB-WIFI-KIT01-R20       | 1T1R wifi module kit for embedded system, IEEE802.11a/b/g/n/ac WiFi with Bluetooth 4.0/3.0+HS, 1 x wifi module, 2 x 250mm RF cable, 2 x Antenna, RoHS |
| 3G Module    | IVS-3G-KIT02-R10*        | 3G module kit for embedded system, F260, 1 x 3G module, RoHS                                                                                          |
| Antenna      | 32505-004200-100-RS*     | WLAN;LTE FULL BAND ANTENNA;RG 178;137MM;RFA-LTE-C55-U-B70-1;Peak Gain:4dBi;50Ω;ARISTOTLE;700~2700MHz;VSWR≤4.0;SMA PLUG;RoHS                           |
| RF Cable     | 32501-000704-100-RS*     | RF:RF CABLE FOR DVBT;LINE DIAMETER:1.37mm;263MM;50Ω;Exceltek;0-6GHz;VSWR≤1.5;I-PEX;SMA JACK;NUT*1;WASHER*2;RoHS                                       |

\* Each 3G module needs two antennas and two RF cables to fully support 3G function.

### Packing List

| Item           | Part No.           | Qty | Description        |
|----------------|--------------------|-----|--------------------|
| Screw pack     | 44013-030041-RS    | 4   | Screw pack         |
|                | 44005-030083-RS    | 4   | Screw pack         |
| Wall mount kit | 41020-0433C2-00-RS | 2   | Wall mount bracket |