

Vehicle PC

Features

- Intel® Apollo Lake processor
- Dual SIM slot
- Optional 3G/Wi-Fi
- 16 x DI/DO
- 1 x HDMI (lockable), 1 x VGA
- Built-in GPS function
- E-Mark certification
- Built-in OBD-II/J1939
- IP4X protection



Specifications

Model	IVS-110-AL	
Chassis	Color	Black
	Dimensions (WxHxD) (mm)	261 x 170 x 60
	System Fan	Fanless
	Chassis Construction	Extruded aluminum alloy
Motherboard	CPU	Intel® Atom™ x7-E3950 Processor (quad-core 2.0GHz, 12W TDP)
	Chipset	SoC
	System Memory	1 x 204-pin DDR3L SO-DIMM. 4GB pre-installed
Storage	Hard Drive	1 x 2.5" SATA 6Gb/s HDD/SSD drive bay
	mSATA / eMMC	1 x mSATA (PCIe Mini Slot) 1 x eMMC 5.0 (reserved)
Communication	WLAN	PCIe Mini Wi-Fi 802.11 a/b/g/n/ac (optional)
	Bluetooth	BT 4.0/3.0+HS (combo with WLAN optional module)
	WWAN	PCIe Mini WCDMA/HSDPA/HSUPA (optional)
	GPS	On board GPS
I/O Interfaces	USB 3.0	4
	Ethernet	1 x RJ-45 PCIe GbE by Intel® I211
	COM Port	1 x RS-232/422/485 (BIOS configuration)
	Digital I/O	1 x 16-bit digital I/O (8-bit input / 8-bit output)
	OBD-II/J1939	1 x DB9 OBD-II/J1939
	Display	1 x VGA, 1 x HDMI
	Resolution	VGA : Up to 1920 x 1200 @ 60 Hz HDMI : Up to 3840 x 2160 @ 30 Hz
	Audio	1 x Line out
	SIM	2 x on board SIM card slot
Expansions	PCIe Mini	1 x Full/Half-size PCIe Mini slot (reserved for WWAN) 1 x Full/Half-size PCIe Mini slot (reserved for mSATA or E-window) 1 x Half-size PCIe Mini slot (reserved for WLAN)
	Power Input	Cigarette lighter power cable: 9 V~ 36 V DC
	Consumption	12V @ 5A (Intel® Atom™ x7-E3950 with 8GB DDR3 memory)
Reliability	Mounting	Wall mount / VESA 100
	Operating Temperature	-30°C ~ +70°C with air flow
	Storage Temperature	-40°C ~ 80°C
	Humidity	10% ~ 95%, non-condensing
	Operating Shock	50 Grms, Half-sine 11 ms Duration (w/ SSD, according to IEC60068-2-27)
	Operating Vibration	5 Grms, 5-500 Hz, 3 Axes(with SSD, according to IEC60068-2-64) MIL-STD-810F 514.5C-2 (SSD)
	Weight (Net/Gross)	2.4 kg / 3.8 kg
OS	Safety/EMC	CE/FCC/E-Mark/IP rating : IP 4X compliant
	Supported OS	Microsoft® Windows 10 IoT Enterprise

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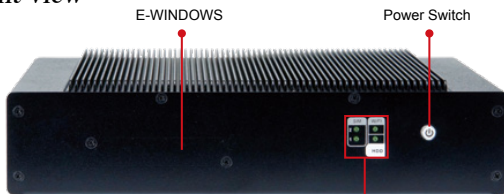
Fleet Management Tracking System



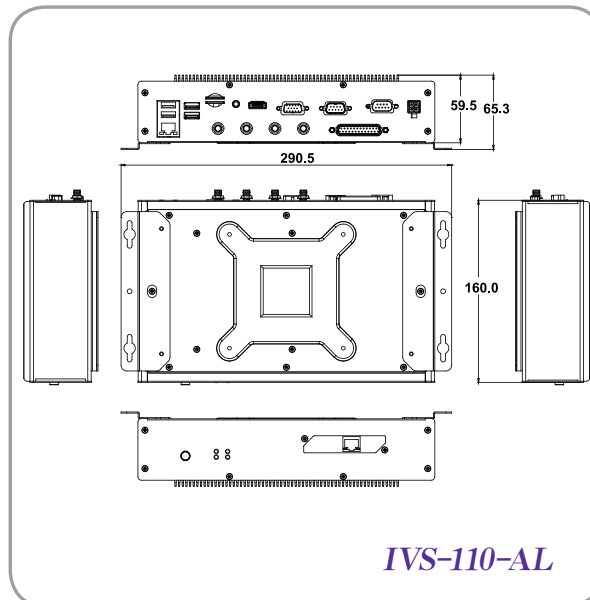
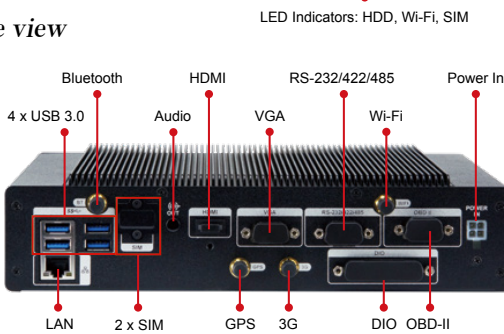
Fully Integrated I/O

Dimensions (Unit: mm)

Front view



Side view



Ordering Information

Part No.	Description
IVS-110-AL-E3/4G-R10	Fanless embedded system with Intel® Atom™ x7-E3950 (12W) Processor with 4GB DDR3L pre-installed memory, on board GPS, HDMI, VGA, one GbE LAN, one 2.5" SATA HDD bay, two SIM slots, RoHS

Options

Item	Part No.	Description
GPS/LTE antenna	32506-000400-100-RS	Integration Antenna, Magnetic Antenna Base+GPS/4G LTE ANTENNA, RG 174, 5000MM, AU-4S-LTE, GPS Gain:27dB, LTE, Gain:0dB, 50Ω, SANAV, 1575.42MHz/704-960MHz/1710-2766MHz, VSWR ≤ 2.0, SMA PLUG, REVERSE SMA PLUG, RoHS
Power adapter	IVIPOWER-4PIN-R10	Power adapter with 4-pin transfer cable, RoHS
OBD-II cable	32025-003400-100-RS	Round cable, OBD-II cable, 2000 mm, 24 AWG, (A) OBD-II 16P male, (B) D-sub 9P female, one piece package with label, RoHS
Cigarette lighter power cable	32002-004000-100-RS	Round cable, power cable, car cigarette lighter cable, 2000 mm, 18 AWG, (A) cigarette lighter (5 A 250 V) + ψ3 green LED, (B) MOLEX 5557-0400 P=4.2, SHANGHAI YING YU, RoHS
Wireless kit	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, 2 x Antenna, RoHS
WWAN kit	IVS-3G-KIT02-R10	3G module kit for embedded system, F260, 1 x 3G module, RoHS
ACC power cable	32002-001900-100-RS	Round cable, power cable, 3000 mm, 16 AWG, (A) MOLEX 5557-04P P=4.2, SHANGHAI YING YU, RoHS

Packing List

Item	Part No.	Qty	Description
Screw pack	44005-030083-RS	4	Screw pack
	42005-000603-RS	4	Screw pack
	44003-030052-RS	4	Screw pack
	44045-020031-RS	5	Screw pack
SATA Cable	32801-003608-100-RS	1	Sata cable, 3, 150mm/150mm, 26AWG, SATA 7+15P female 180°, SATA 7P female 90°+lock, JST PHR-2 P=2.0, One pcs PKG W/ label, RoHS
Wall Mount Kit	41020-0482C2-00-RS	2	Wall mount bracket

E-Window (for ATO assembly) **E-Window**

Part No.	Description
E-MPCIE-LAN-R10	PCIe Mini card supports 1-port GbE with Realtek RTL8111E controller, with PMS 194C I/O bracket and 250mm cable, R10
E-MPCIE-DLAN-R10	PCIe Mini card supports 2-port GbE with Intel I211 controller, with PMS 194C I/O bracket and 250mm cable, R10