

VC230-AL

Atom

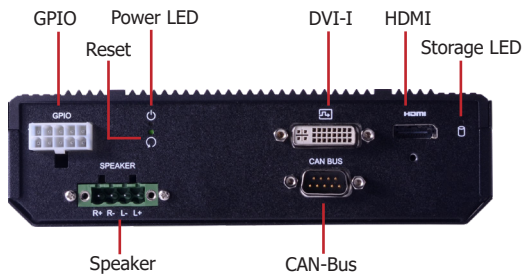


Features

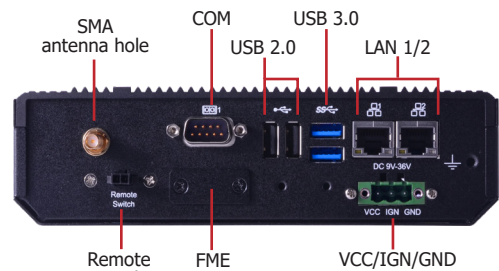
- Anti-vibration and fanless in-vehicle computer
- Supports ignition delay on/off function
- 1 mSATA, eMMC storage options
- Support GNSS by default
- Dual SIM support for cellular
- Supports Wi-Fi, LTE, and CAN bus communication



Panel

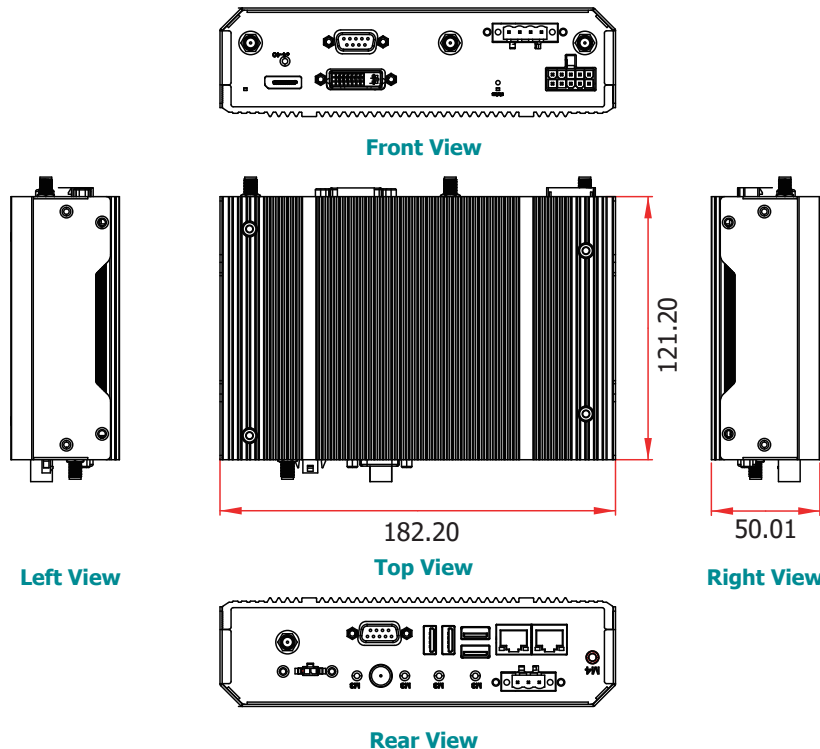


Front View



Rear View

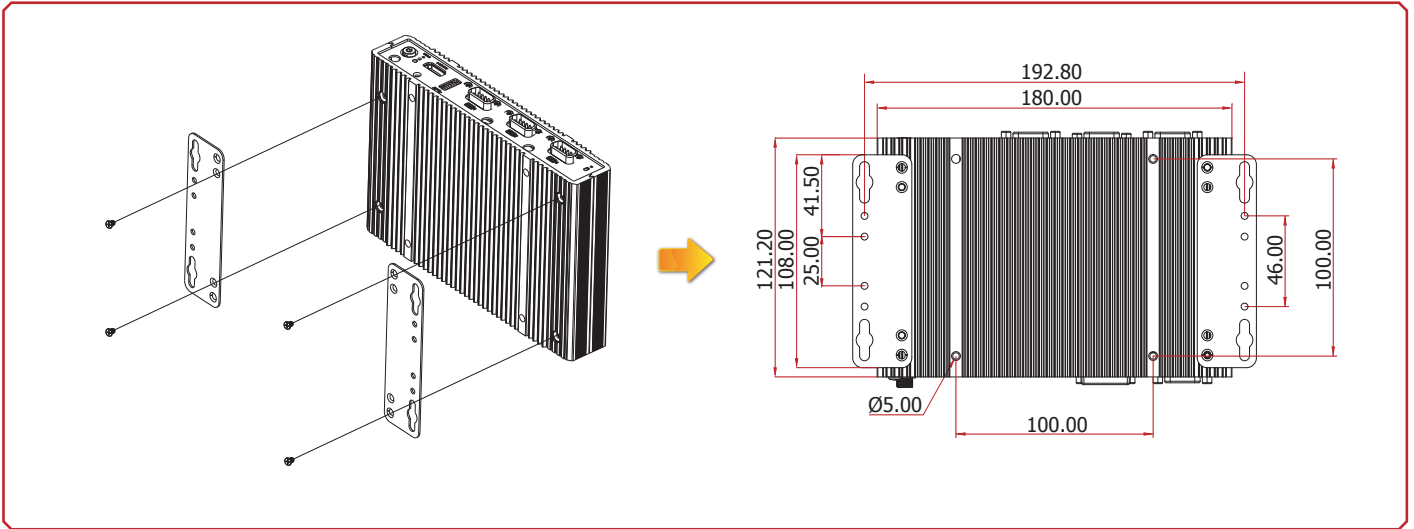
Dimensions



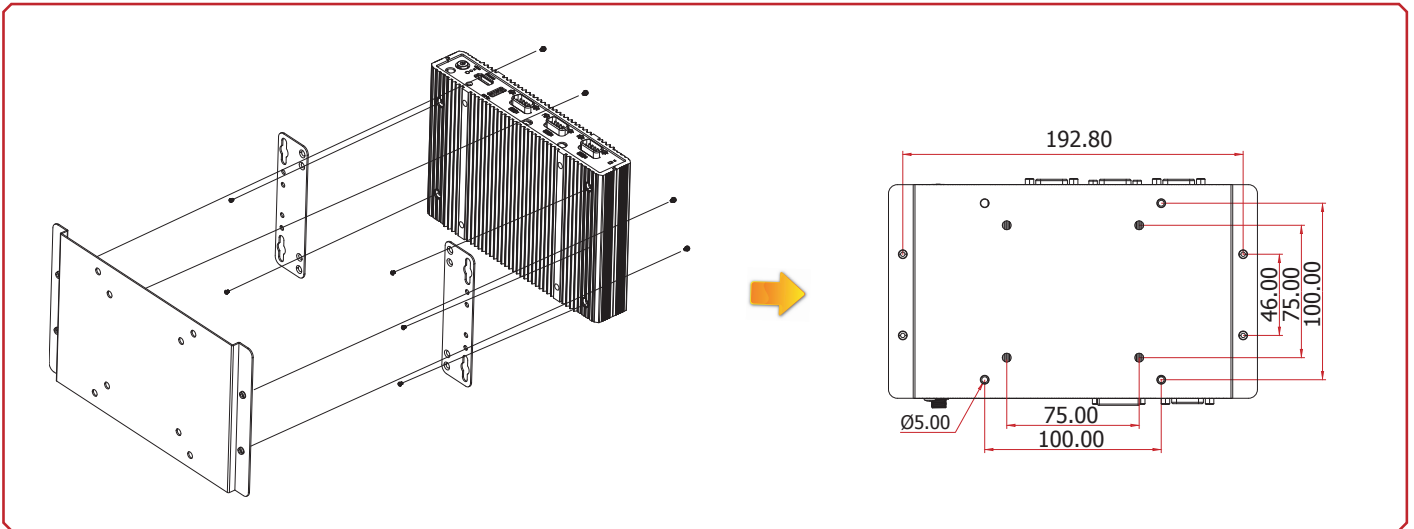
► Specifications

SYSTEM	Processor	Intel Atom® Processor E3900 Series, BGA 1296 Intel Atom® x7-E3950 Processor, Quad Core, 2M Cache, 1.6GHz (2.0GHz), 12W Intel Atom® x5-E3940 Processor, Quad Core, 2M Cache, 1.6GHz (1.8GHz), 9W Intel Atom® x5-E3930 Processor, Dual Core, 2M Cache, 1.3GHz (1.6GHz), 6.5W
	Memory	1 DDR3L 1600/1866MHz SODIMM memory support up to 8GB
	BIOS	AMI SPI 64Mbit
GRAPHICS	Controller	Intel® HD Graphics
	Display	1 x HDMI 1 x DVI-I HDMI: resolution up to 3840x2160 @ 60Hz DVI-I: resolution up to 2560x1600 @ 60Hz
	Dual Displays	HDMI + DVI-I
STORAGE	Internal	32GB/64GB eMMC onboard 1 x mSATA slot
EXPANSION	Interface	1 x Full-size Mini PCIe (PCIe/USB/Dual micro SIM) 1 x Full-size Mini PCIe (PCIe/USB/micro SIM) 1 x Half-size Mini PCIe (share with 1 x mSATA slot)
ETHERNET	Controller	2 x Intel® I210AT PCIe (10/100/1000Mbps)
	Interface	2 x RJ-45 GbE ports
GNSS	GNSS	Support GPS, Galileo, GLONASS, BeiDou by u-blox NEO-M8N Dead reckoning support upon request
LED	Indicators	1 x Power LED 1 x Storage LED
FRONT I/O	Display	1 x HDMI 1 x DVI-I
	DIO	Isolated 8 bits DIO via 2 x 5pin 4.2mm power connector Input voltage: 0 to 30VDC, Output current: 50mA pre pin and Max. 200mA total. On-state voltage: 12VDC nominal, open collector to 30VDC.
	CAN Bus	Supports dual Can bus via 1 x DB9 port by DFI MPE-CAN2 Mini PCIe module (optional)
	Buttons	1 x reset button
	Audio Out	1 x 4pins 5.00mm terminal block connector
	Antenna holes	3 x SMA antenna holes
REAR I/O	Ethernet	2 x GbE (RJ-45)
	Serial	1 x RS-232/422/485 (DB9-M)
	USB	2 x USB 2.0 (type A) 2 x USB 3.0
	Antennas	1 x SMA antenna hole 1 x FME antenna hole
WATCHDOG TIMER	Output & Interval	System reset, programmable via software from 1 to 255 seconds
POWER	Type	Wide range 9~36V with ignition control
	Connector	3-pin terminal block (VCC/ACC/GND)
OS SUPPORT		Windows 10 64-bit Linux CentOS 7
MECHANISM	Construction	Aluminum + SPGC Metal
	Mounting	Wall/VESA mount
	Dimensions (W x H x D)	180mm x 50mm x 121.2mm (W x H x D)
	Weight	1 kg including CPU and memory
ENVIRONMENT	Operating Temperature	-40 to 70°C
	Storage Temperature	-40 to 85°C
STANDARDS AND CERTIFICATIONS	Shock	MIL-STD-810G Method 516.6
	Vibration	MIL-STD 810G Method 514.6C-3
	Certifications	CE, FCC Class B, E-mark (E13)

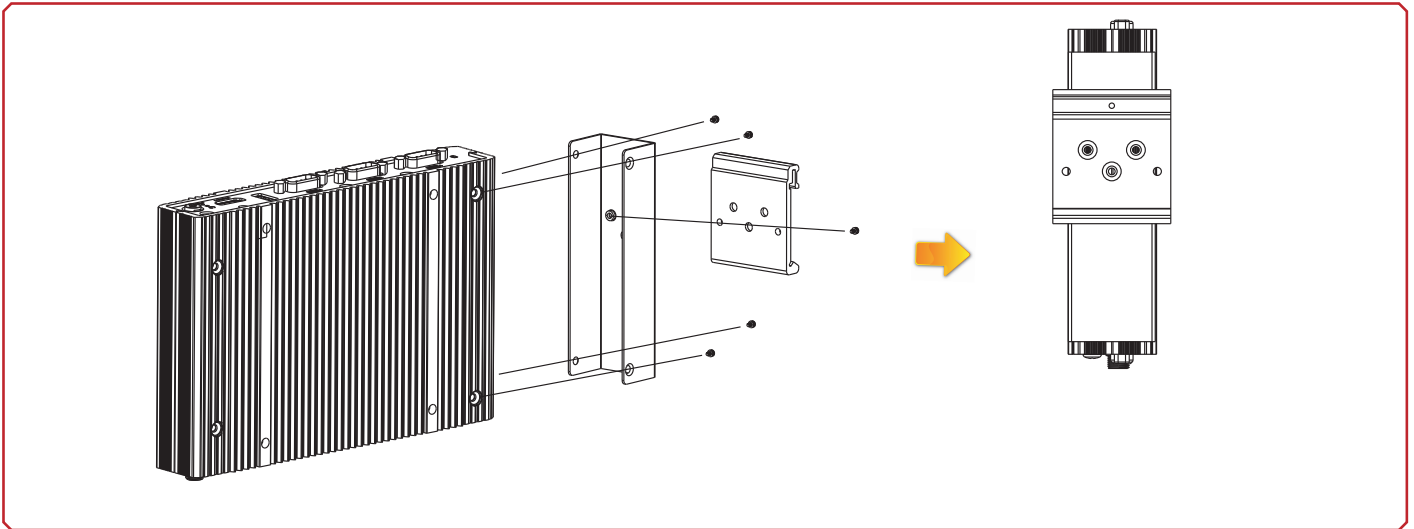
► Wall Mounting



► VESA Mounting



► DIN Rail Mounting



► Ordering Information

Model Name	Part Number	Description
VC230-AL-E3950	750-VC2301-000G	Fanless, Intel Atom X7-E3950, 4GB DDR3L-1866, 32GB eMMC, 2 LAN, 1 HDMI, 1 DVI-I, 1 COM, 4 USB, F/G RoHS
VC230-AL-E3940	750-VC2301-200G	Fanless, Intel Atom X5-E3940, 4GB DDR3L-1866, 32GB eMMC, 2 LAN, 1 HDMI, 1 DVI-I, 1 COM, 4 USB, F/G RoHS
VC230-AL-E3930	750-VC2301-300G	Fanless, Intel Atom X5-E3930, 4GB DDR3L-1866, 32GB eMMC, 2 LAN, 1 HDMI, 1 DVI-I, 1 COM, 4 USB, F/G RoHS

► Optional Items

Optional Items	Part Number	Description
mSATA	785-MS64GMF	mSATA Card, 64GB MLC, RoHS
	785-MS32GMF	mSATA Card, 32GB MLC, RoHS
	785-MS16GMF	mSATA Card, 16GB MLC, RoHS
Wi-Fi	761-110091-000G	WiFi kit, Wireless module, w/Antenna cable*2, 200mm, WPEA-121N a/b/g/n (Sparklan), RoHS
4G LTE	761-EC5002-000G	4G LTE kit with Quectel EG25G-E 4G Mini PCIe module, Antenna*3, SMA cables*3
Wall Mount	761-EC7000-000G	EC700 Wall mount kit, RoHS
VESA Mount	761-EC7000-100G	VC230-BT VESA mount kit, RoHS

785-XXX is a group number instead of a unique part number. Please contact your regional sales representative if you need more information.

► Packing List

• 1 VC230-AL system unit
• 2 mounting screws for Mini PCIe module
• 1 Quick Installation Guide