

Fanless In-Vehicle Box PC with Intel® Celeron® Processor J1900



Features

- In-Vehicle Fanless Box PC, Intel® Celeron® Processor J1900
- CAN Bus 2.0B, 4 PoE Ports, Isolated Digital I/O
- GPS or GLONSS Systems
- 3 Mini PCIe (3G / WLAN / LTE Modules), 2 SIM Ejectors
- 9-36 V DC Power Input with Ignition Pin and Swappable Fuse
- -20~60° C Operating Temperature

Applications

- In-vehicle Control Systems
- Remote Video Surveillance
- Multimedia Display and Digital Signage in Vehicles
- Wireless Network Communication

➔ Packing List

Description
1 x VBC-2020
1 x Driver CD
1 x Startup Manual
2 x 3-pin Power Connector
1 x Power Adapter (AC-to-DC, 12 V @ 7 A, 84 W)

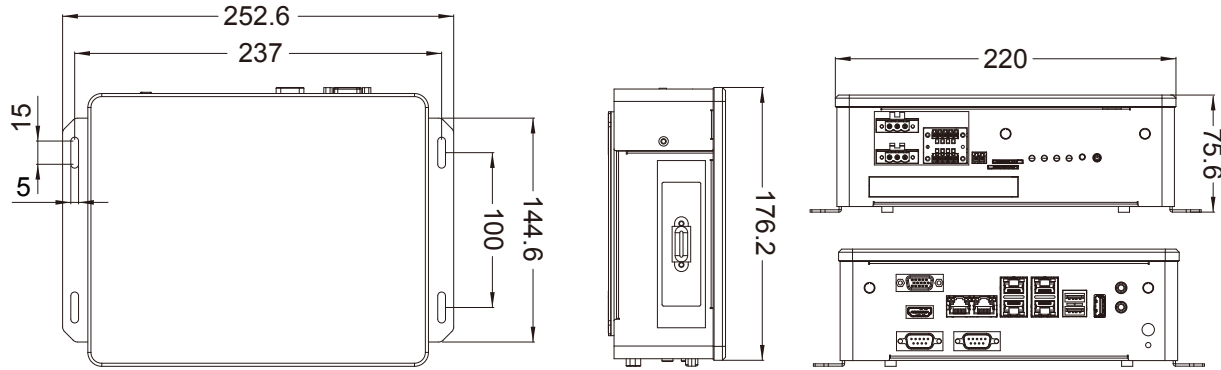
➔ Optional Items

Part No.	Description
ACS-PS-US	Power Cable 3-pin, 180 cm, USA Type
ACS-PS-EU	Power Cable 3-pin, 180 cm, Euro Type
ACS-PS-CN	Power Cable 3-pin, 180 cm, China Type
AWD-3G001-00	3G (HSPA+) Module + 1 Antenna, Full-size
AWD-4G001-00	4G (LTE) Module + 2 Antennas, Full-size
AWD-WF001-00	Wi-Fi 802.11 bgn (1T1R) + 1 Antenna, Half-size
AWD-WF002-00	Wi-Fi 802.11 bgn/BT4.0 (1T1R) Module + 1 Antenna (Dual band), Half-size
AWD-WF003-00	Wi-Fi 802.11 abgn/ac/BT4.0 (2T2R) Module + 2 Antennas (Dual band), Half-size
KIT-CAN-CN-01	CAN Connector
KIT-DIO-CN-01	DIO Connector

➔ Ordering Information

Part No.	Description
VBC-2020-A1	Intel® Celeron® Processor J1900 w/ 3 USB, 2 COM, DIO, CAN Bus, 2 GbE, 4 PoE, Line out, Mic in, 1 VGA, 1 HDMI, 1 GPS

→ Dimensions



→ Specifications

Model		VBC-2020
Processor System	CPU	Intel® Celeron® Processor J1900
	Frequency	Quad-Core 2.0 GHz, 4 Threads 2.42 GHz (Boost)
	Cache	2 MB
	System Chipset	N/A
Memory	Technology	DDR3L 1333 MHz SDRAM
	Max. Capacity	8 GB
	Socket	1 (204-pin SO-DIMM)
Display	Graphics Engine	Intel® Gen7 Graphic Engine
	Frequency	Intel® HD Graphics with Graphics Base Frequency 688 MHz, support DirectX 11, OpenGL 3.2, OpenCL 1.1
	VGA	Up to 2560 x 1600 at 60 Hz for CRT
	HDMI	1.3a, up to 1920 x 1080 at 60 Hz for HDMI
I/O Interface	Dual Display	1 VGA + 1 HDMI
	USB	1 USB 3.0, 2 USB 2.0
	Serial Port	1 RS-232/422/485, 1 RS-232
	Digital I/O	8-bit isolated digital I/O (4 input and 4 output, 5 V @ 0.5 A)
	DC output	12 V DC output (2x2 pin), 1A
Ethernet	CAN Bus	Built-in CAN bus 2.0B. Optional OBDII function (SAE J1939 / J1708)
	Controller	6 Ethernet Connection (Realtek RTL8111E), 4 PoE (IEEE802.3af)
GNSS	System	GPS or GLONSS
	Chipset	Realtek ALC892 HD Audio
Audio	Connectors	Line out, Mic in
	Expansion	Mini PCIe
Storage	SATA II (Optional)	1 Swappable 2.5" HDD/SSD Bay
	mSATA	1 (Colay Sata conn)
Power	Power Type	AT / ATX
	Power Supply Voltage	9-36 V DC input (3-pin Terminal Block VCC, GND, IGN)
	Power Connector	3-pin Terminal Block (PSON, GND, Remote Control)
	Fuse	20 A / 9 V, 15 A / 12 V, 5 A / 36 V
	Power Consumption (Typical)	TBD
Others	Power Consumption (Max)	TBD
	Recovery Button	System Recovery Button
Environment	Operational	-20~60° C (-4~140° F) w/ Industrial SSD, w/ Air flow (Humidity: 70° C @ 80% RH Non-condensing)
	Non-Operational	-40~85° C (-40~185° F) (Humidity: 60° C @ 95% RH Non-condensing)
	Vibration	Operating: MIL-STD-810G, Method 514.6, Category 4, common carrier US highway truck vibration exposure; Storage: MIL-STD-810G, Method 514.6, Category 24, minimum integrity test
	Shock	Operating: IEC 60068-2-27, Method 516.6, Procedure I, functional shock=20g Storage: MIL-STD-810G, Method 516.6, Procedure V, crash hazard shock test=75g
Certificate	EMC	CE & FCC Class A
	General	Dimensions (W x H x D)
General	Weight	2.5 kg (5.5 lb)
	Operating System	Windows 7/8.1/10 Pro, WS7E/P, WES8, Ubuntu 14.04