

Rugged In-Vehicle Computer with Intel® Elkhart Lake Celeron® J6412 Processor

Overview

The MVC-3100 in-vehicle box computer features an Intel® Elkhart Lake Celeron® J6412 processor, a rugged aluminum enclosure, and a fanless design with a fully sealed, IP65-rated housing. It includes IP65-protected M12 I/O connectors, operates across a wide temperature range of -20°C to 60°C, and supports 9–36V DC input with optional ACC ignition control. The system also offers flexible expansion options for Wi-Fi, Bluetooth, 4G LTE, GPS, and CAN 2.0B modules.

Features

- Rugged aluminum enclosure and fanless design
- Full IP65 system design with M12 I/O connectors
- -20 to 60°C operating temperature
- 9 to 36VDC input, optional ACC ignition control
- Flexible expansion capability for WiFi, Bluetooth, 4G LTE, GPS, CAN2.0B



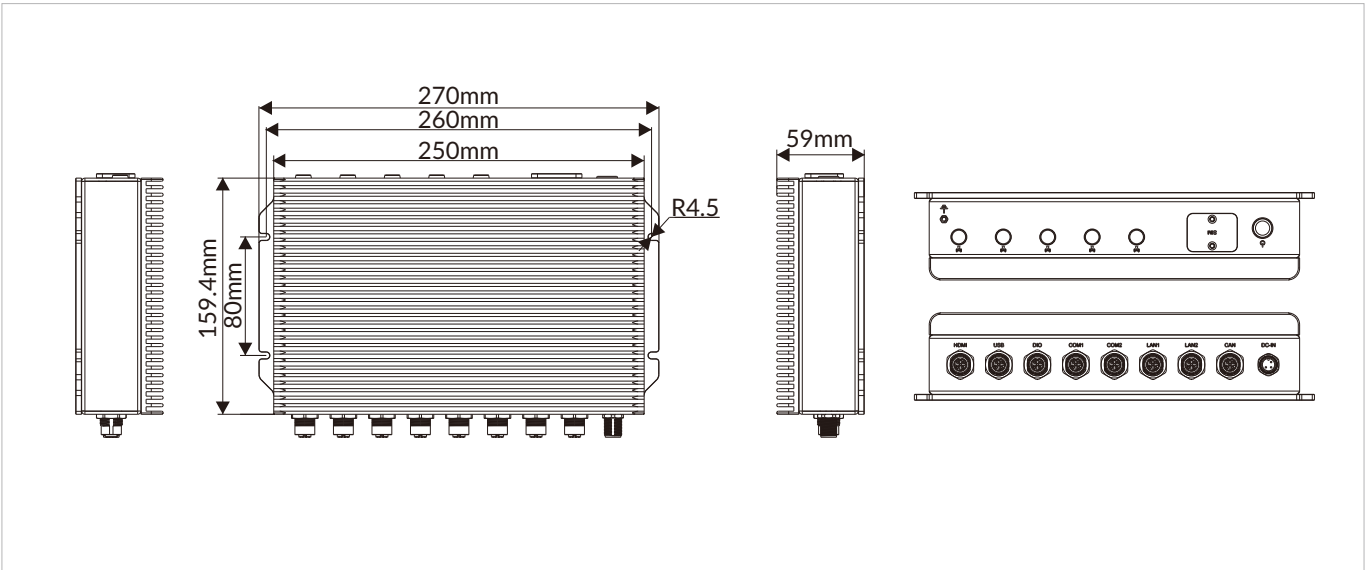
I/O Interfaces



Specifications

System	
CPU	Intel® Elkhart Lake Celeron® J6412 processor
Memory	1x DDR4 3200 MHz SO-DIMM up to 32GB
Storage	1x M.2 2280 SATA
TPM	BIOS supports
Watchdog Timer	Software Programmable supports 256 levels system reset
I/O Ports	
USB Port	2x USB2.0
Serial Port	2x RS232/485
Ethernet	2x GbE LAN
Display Port	1x VGA
SIM Card Slot	1x SIM card slot
DIO	8x DIO with isolation
CAN bus	2x CAN2.0B with isolation
Expansion Slot	
Mini-PCle	1x Mini PCIe slot (for 4G LTE/GPS), 1x Mini PCIe slot (for WiFi)
M.2	1x M.2 2280 slot (for SSD)
Antenna Hole	5x SMA Holes
RF Communication	
Wi-Fi	Wi-Fi (optional)
Cellular	4G (optional)
Bluetooth	BT (optional)
GNSS	GPS (optional)
Audio	
Audio	Line out
Power	
Button	Power button
DC Input	9 to 36VDC
Ignition ON/OFF	ACC (optional)
Power Mode	ATX/AT
Operating System	
Windows	Windows 10, windows 11
Linux	Ubuntu
Mechanical	
Dimensions (W x D x H)	250×160×59mm (9.84×6.3×2.32 inches)
Weight (N.W.)	3.5Kg (7.72lbs)
Mounting	Wall mount
Material	Aluminum
Environment	
Operating Temperature	-20 to 60°C(-4 to 140°F)
Storage Temperature	-40 to 85°C(-40 to 185°F)
Relative Humidity	5~95%, non-condensing
IP Rating	IP65 compliant
Certification	
EMC	CE, FCC Class A

Dimensions



Ordering Information

Part No.	Description
MVC-3100-J6412-A1	J6412, 2x LAN, 2x COM, 2x USB, 8x DIO, 2x CAN, 1xVGA, 9~36VDC