

# POC-351VTC Series

Intel® Apollo Lake Atom™ E3950 Ultra-compact In-vehicle Controller with GbE, PoE+ and Isolated CAN bus



## Key Features

- Intel® Apollo Lake Atom™ E3950 quad-core processor
- Rugged, optional -40 °C to 70 °C fanless operation
- Two IEEE 802.3at PoE+ ports and one GbE port
- One isolated CAN bus port for in-vehicle communication
- One M.2 socket and three mPCIe sockets
- Aluminum heat-spreader for M.2/ mPCIe modules
- 4-CH isolated DI and 4-CH isolated DO
- 8~35V DC input with built-in ignition power control



## Introduction

POC-351VTC is an ultra-compact, fanless in-vehicle controller powered by Intel® Apollo Lake Atom™ E3950 quad-core processor. It combines finesse performance, extraordinary reliability and affordability for versatile in-vehicle applications.

POC-351VTC offers two PoE+ ports to power devices such as IP cameras, and one additional GbE port for data communication. It also features isolated CAN bus 2.0 port and RS-232/ 422/ 485 ports for communicating with other automotive devices. Wide-range DC input and ignition power control make POC-351VTC fit for various vehicle types.

Wireless and internet access is essential for modern day in-vehicle applications and POC-351VTC has a total of four M.2/ mPCIe sockets and six antenna holes to accommodate a variety of 4G, 3G, WIFI and GPS modules. An aluminum heat-spreader is thoughtfully designed to dissipate the heat generated by modules to maintain superior operating stability, for the system and communication modules.

## Specifications

### System Core

Processor	Intel® Atom™ E3950 1.6/ 2.0 GHz quad-core processor
Graphics	Integrated Intel® HD graphics 505
Memory	Up to 8GB DDR3L-1866 (single SO-DIMM slot)

### Panel I/O Interface

Ethernet	3x Gigabit Ethernet ports by Intel® I210 GbE controller
PoE	IEEE 802.3at PoE+ on port #2 and #3
Video Port	VGA and DVI dual display outputs via DVI-I connector
USB	2x USB3.0 ports and 2x USB 2.0 ports
Serial Port	<ul style="list-style-type: none"> <li>• 1x software-programmable RS-232/ 422/ 485 ports (COM1)</li> <li>• 3x 3-wire RS-232 ports (COM2/ COM3/ COM4) or 1x RS-422/485 port (COM2)</li> </ul>
Audio	1x Mic-in and 1x speaker-out
CAN bus	1x isolated CAN 2.0 port
Isolated DIO	4x isolated DI and 4x isolated DO

### Internal I/O Interface

M.2	1x M.2 B key socket for 3G/ 4G option with USIM support
Mini-PCIe	3x full-size mini PCI Express sockets with USIM support

### Storage Interface

mSATA	1x half-size mSATA port 1x full-size mSATA port
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### Power Supply

DC Input	8~35 VDC
Input Connector	3-pin pluggable terminal block for DC input (IGN/ GND/ V+)

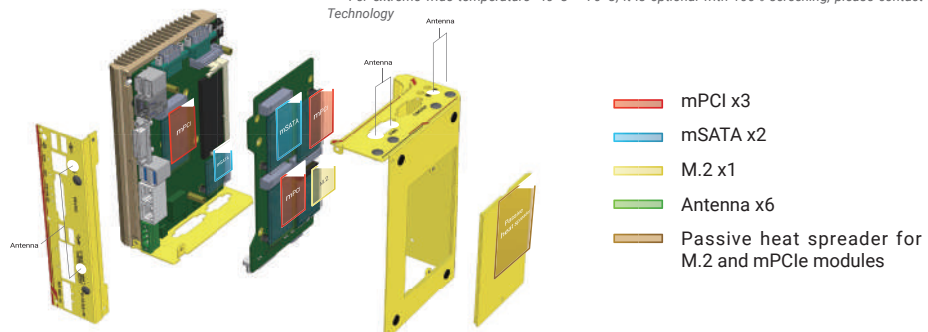
### Mechanical

Dimension	153 mm (W) x 108 mm (D) x 56 mm (H) (POC-351VTC) 153 mm (W) x 108 mm (D) x 68 mm (H) (POC-351VTC-70)
Weight	1.0 kg (POC-351VTC) 1.1 kg (POC-351VTC-70)
Mounting	Horizontal wall-mount (standard) or vertical wall-mount (optional)

### Environmental

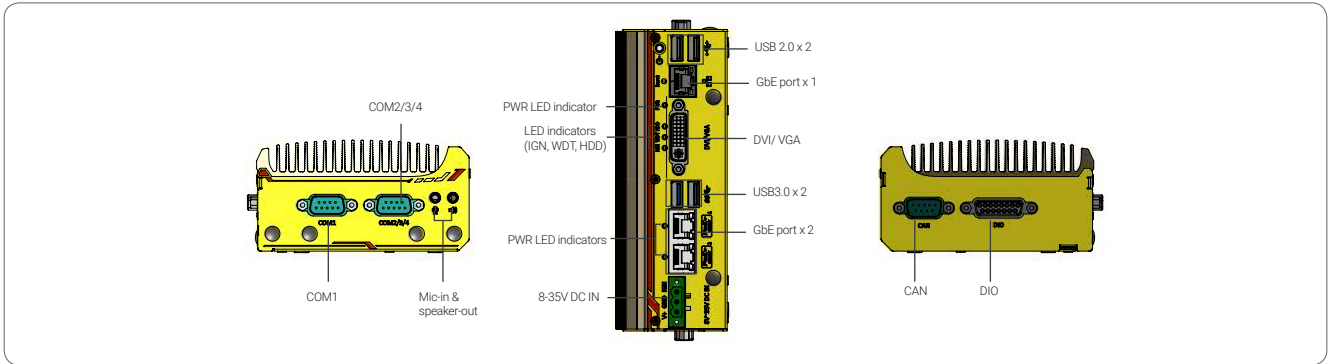
Operating Temperature	-25°C ~ 70°C */** -40°C ~ 70°C (optional) */***
Storage Temperature	-40°C ~ 85°C**
Humidity	10%~90% , non-condensing
Vibration	Operating, 5 Grms, 5-500 Hz, 3 Axes (w/ mSATA, according to IEC60068-2-64)
Shock	Operating, 50 Grms, Half-sine 11 ms Duration (w/ mSATA, according to IEC60068-2-27)
EMC	E-Mark for in-vehicle applications CE/ FCC Class A, according to EN 55032 & EN 55024

\* For wide temperature use condition, a wide temperature/industrial mSATA module is required.  
\*\* For full function use condition (mini-PCIe, M.2, and mSATA are all adopted), the recommended operating temperature is -25°C ~ 60°C  
\*\*\* For extreme wide temperature -40°C ~ 70°C, it is optional with 100% screening, please contact Neousys Technology

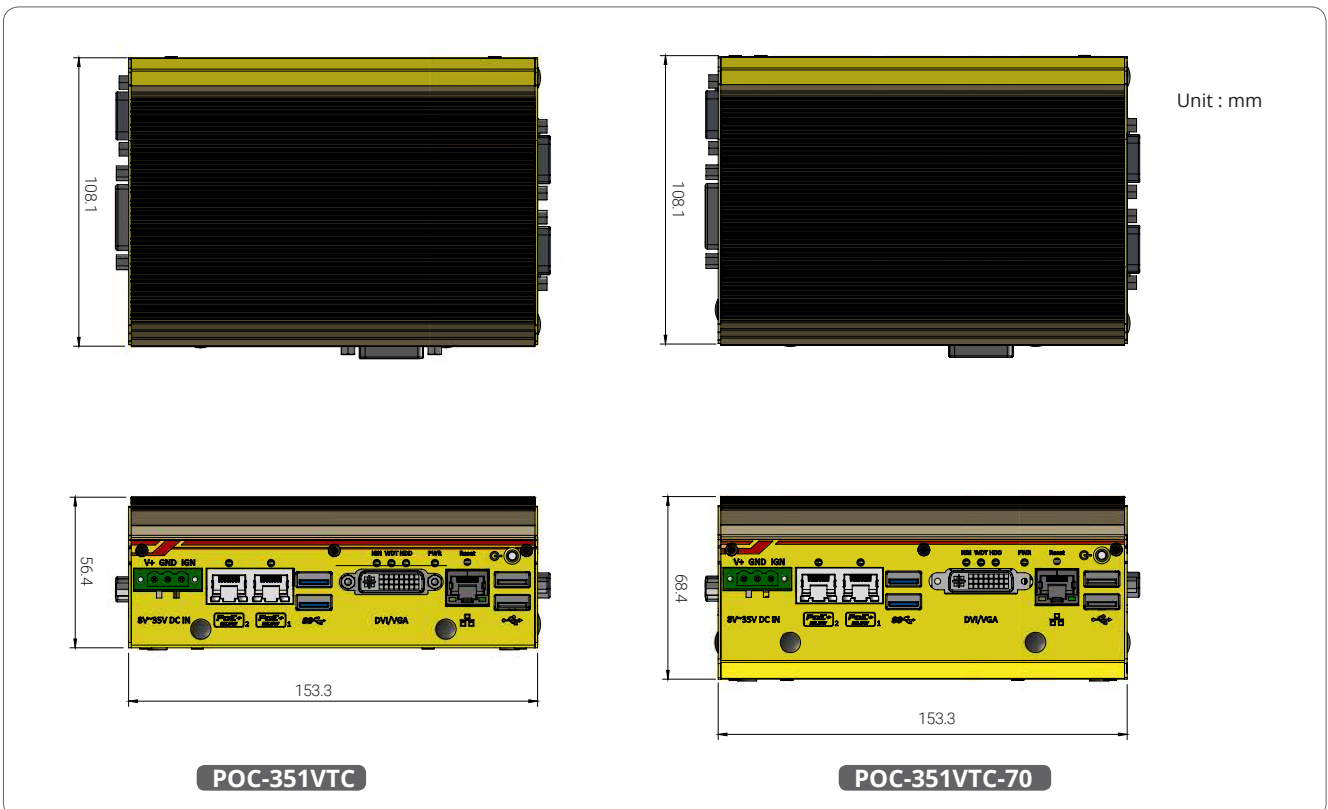


- mPCI x3
- mSATA x2
- M.2 x1
- Antenna x6
- Passive heat spreader for M.2 and mPCIe modules

## Appearance



## Dimensions



## Ordering Information

Model No.	Product Description
POC-351VTC	Intel® Apollo Lake Atom™ E3950 ultra-compact in-vehicle controller with 1x GbE, 2x PoE+ and isolated CAN
POC-351VTC-70	Intel® Apollo Lake Atom™ E3950 ultra-compact in-vehicle controller supporting optional LTE socket modem

## Optional Accessories

Wmkit-V-POC300	Wall mounting assembly for POC-351VTC, vertical type
PA-60W-OW	60W AC/DC power adapter with 12V, 5A DC output, cord end terminals for terminal block. operating temperature : -30 to 60 °C.