

# AIV-TGH7E

11th Gen Intel® Core™ i7/i5/i3 Processor(Tiger Lake)  
Fanless In-Vehicle Computer



## Features

- Intel® 11th Generation Core™ i7/i5/i3 Processor
- Support 1 DDR4 3200 SODIMM, up to 32GB
- Support 2.5GbE, USB 3.2 Gen2
- CAN Bus provide
- Two front easy access 2.5" SATA III storage bay
- 9-32Vdc w/in-vehicle power ignition control
- Fanless design
- Wide Operating Temperature -40~70°C



CE FCC

## Others

TPM	Optional By Request
Watchdog Timer	255 Levels
Smart Management	Wake on LAN, PXE supported
HW Monitor	Monitoring temperature, voltages. Auto throttling control when CPU overheats.

## Software

OS Support	Windows 10, Linux
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## Power Requirement

Power Input	9V to 32V, DC-in
Power Interface	3-pin Terminal Block : V+, IGN, V- With Power Ignition Control

## Mechanical & Environment

Dimension	220mm(W) x 175mm(D) x 73mm(H) (8.66" x 6.89" x 2.87")
Weight	TBD
Mounting	Wallmount
Operating Temperature	-40°C to 70°C (-40°F to 158°F)
Storage Temp	-40°C to 80°C (-40°F to 176°F)
Humidity	5% to 90% Humidity, non-condensing
Shock	IEC 60068-2-27 SSD : 50G @ wallmount, Half-sine, 11ms
Vibration	IEC 60068-2-64 SSD : 5Grms, 5Hz to 500Hz, 3 Axis
EMC	CE / FCC class A/ E-Mark

\*Please adopt wide operation temperature RAM, SSD, HDD to get better and stable system performance.

## Specification

### System

CPU	Intel® 11th Generation Core™ i7/i5/i3 Processor (Tiger Lake-H) i7-11850HE (8C/16T, 2.60GHz, up to 4.70GHz) i5-11500HE (6C/12T, 2.60GHz, up to 4.50GHz) i3-11100HE (4C/8T, 2.40GHz, up to 4.40GHz)
Chipset	Intel® HM570E
Memory	1 DDR4-3200 Memory supports up to 32GB (ECC)

### Video

Graphic Controller	Intel® Iris® X Graphics
Interface	1 HDMI , 2 DP

### Storage

SATA	2 SATA III (6Gbps) support S/W RAID 0, 1
Storage Device	2 Front-access 2.5" SSD/HDD Tray

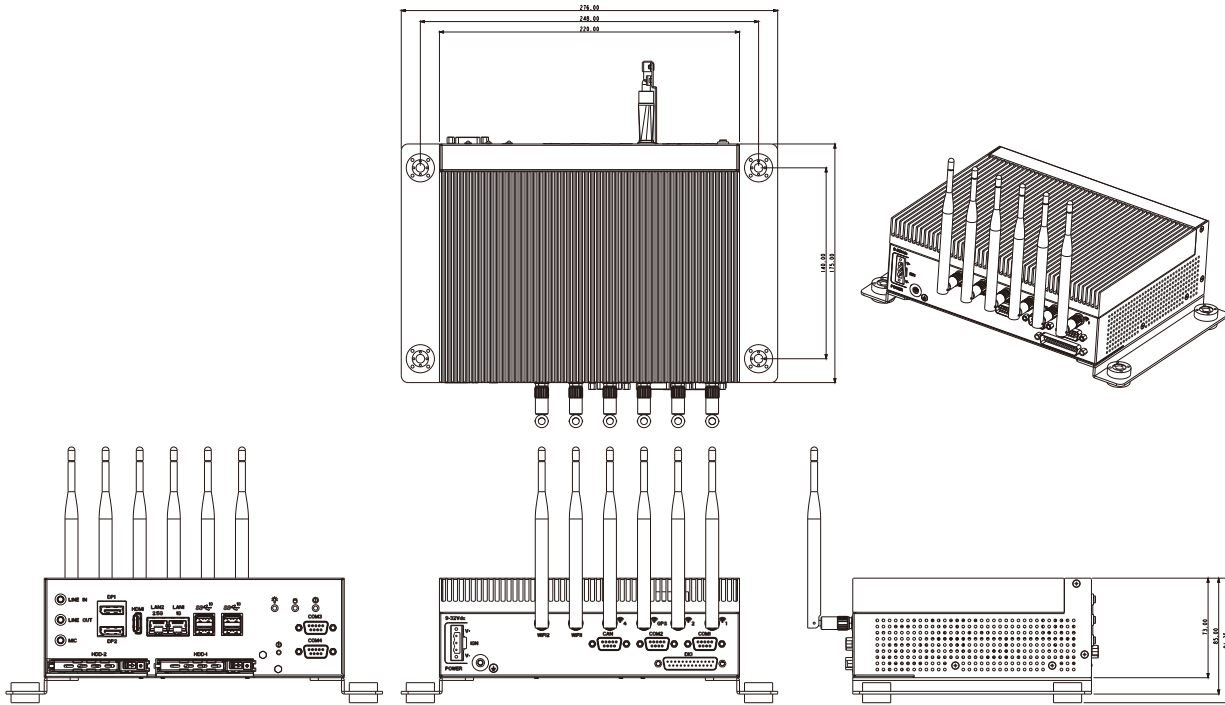
### I/O

LAN	LAN 1 : RJ45 Type Intel® I225 2.5GigE LAN LAN 2 : RJ45 Type Intel® I219 GigE LAN
Serial	2 DB9 Type RS-232/RS422/485 2 DB9 Type RS-232
USB	4 Type A USB 3.2 Gen2
DIO	16 DIO, DB25 Type connector
Audio	1 Mic-in, 1 Line-in, 1 Line-out
CAN BUS	1 DB9 CANBus
LED	Power, HDD, Status
Button	1 Power Press Button
Antenna Hole	6 Antenna Holes

### Expansion

Mini PCIe	1 x Half Size Mini PCIe slot
M.2	1 x M.2 B Key(3052)
SIM Slot	1 Nano SIM Slot (Internal)

## Dimension



## I/O Connectors



## Packing List

- 1 x AIV-TGH7E-Series
- 2 x Wall mount bracket
- 1 x 3-Pin Terminal block
- 1 x Screws Package

## Order Information

AIV-TGH7E7-A10	AIV-TGH7EX, Intel i7-11850HE, CANBus
AIV-TGH7E5-A10	AIV-TGH7EX, Intel i5-11500HE, CANBus
AIV-TGH7E3-A10	AIV-TGH7EX, Intel i3-11100HE, CANBus

## Optional Accessory

DDR4 32G	Certified DDR4 32GB 3200MHz RAM
DDR4 16G	Certified DDR4 16GB 3200MHz RAM
DDR4 8G	Certified DDR4 8GB 3200MHz RAM
DDR4 4G	Certified DDR4 4GB 3200MHz RAM
5G Module	5G & GNSS Module with 2 Antennas, 1 GPS antenna
4G Module	4G & GNSS Module with 3 Antennas, 1 GPS antenna
WiFi & Bluetooth Module	WiFi & Bluetooth Module with Dual Antenna