VPC-5640S

Fanless robust vehicle computer with multi-PoE ports and Intel® Core™ 12th Gen. CPU

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Features

- Intel® Core™ 12th Gen. i7 / i5 / i3 CPU
- 2x DDR5 SODIMM RAM, up to 64 GB
- 4x 2.5GbE PoE/PSE 802.3 af/at
- Dual LTE-module with 4 SIM slots, 5G supported
- MIL-STD-810H and E-Mark certified
- Operating temperature: -40 °C ~ 70 °C

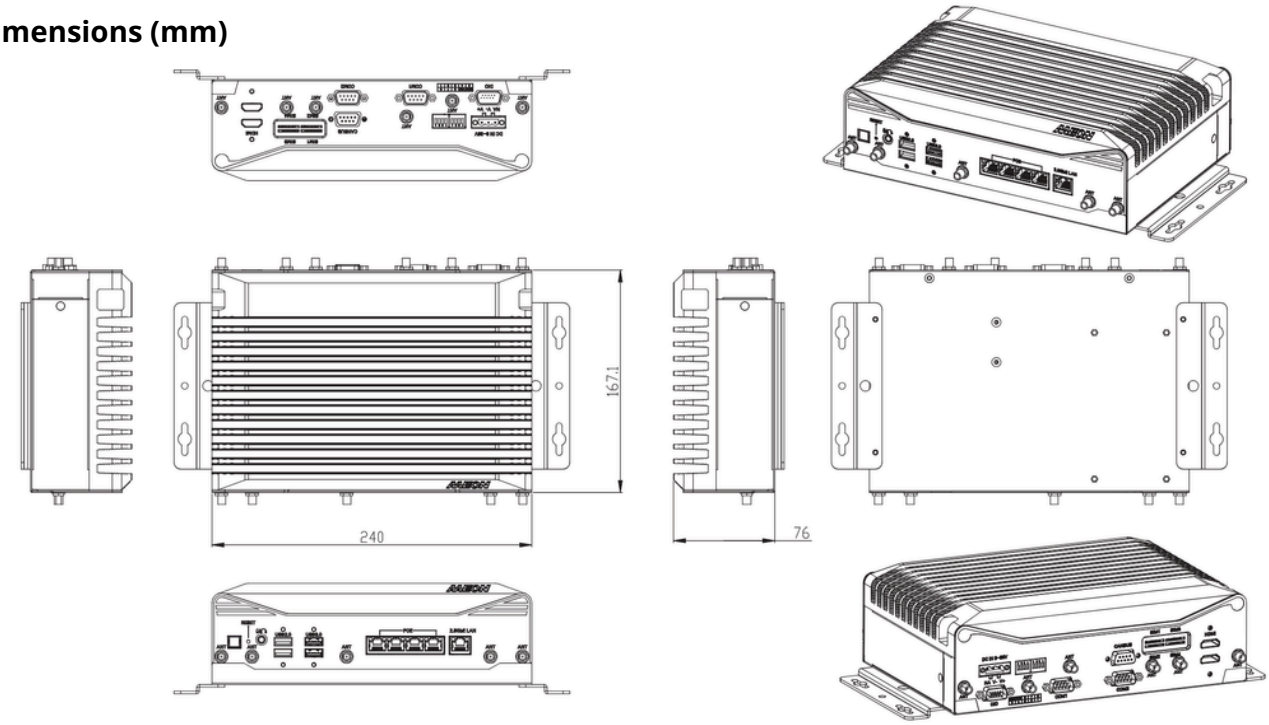
VPC-5640S – Fanless Vehicle Computer with Multiple PoE Ports

The VPC-5640S is a rugged and fanless embedded computer system specifically designed for use in vehicles. With its multi-PoE design and fanless operation, this computer delivers reliable performance in demanding environments. The VPC-5640S comes standard with a 12th Generation Intel® Core™ i7-1265UE processor, offering impressive computing power. Alternatively, Intel® Core™ i5-1245UE and i3-1215UE processors are also available. With support for DDR5 SODIMM memory modules, the system memory can be expanded up to 64GB.

This vehicle computer offers comprehensive connectivity options, including two HDMI ports for display connections and an Intel® I226-LM 2.5GbE LAN interface for fast data transfers. Additionally, it features four Smart PoE ports, compliant with IEEE802.3 at/af standards, sharing a common 60W power budget for every group of four PoE ports. With multiple expansion slots, the VPC-5640S allows integration of WiFi/Bluetooth modules via an M.2 2230 E-Key slot, LTE/5G modules via an M.2 3052 B-Key slot with dual-SIM support, and NVME PCIe SSDs via an M.2 2280 M-Key slot. The embedded PC is equipped with a variety of input and output interfaces, including USB 3.2 Gen 2 and USB 2.0 ports, LAN ports, PoE LAN ports, Line-Out & MIC-in ports, reset and power buttons, as well as various other interfaces for RS-232/422/485, Isolated CANBus FD, DIO 8 bit, and more.

The VPC-5640S is designed for use in extreme environments, offering an operating temperature range of -40°C to 70°C and MIL-STD-810H-certified vibration and shock resistance. Additionally, it holds CE/FCC Class A, UKCA, and E-Mark certifications for reliable performance and compliance. With a compact form factor and various mounting options, the VPC-5640S is easy to install. Its robust housing and internal HDD bays ensure reliable performance even in challenging vehicle environments.

Dimensions (mm)



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	Product: VPC-5640S
SYSTEM	
CPU	Default: 12th Generation Intel® Core™ i7-1265UE Processor Project Based: Intel® Core™ i5-1245UE Intel® Core™ i3-1215UE
Chipset	-
RAM	2x DDR5 SODIMM, up to 64GB
Storage	1x 2.5″ HDD/SSD bay
GPS	VS: Built-in GPS, NEO-M9V & G-Sensor
Expansion	1x M.2 2230 E-Key (PCIe [x1] + USB 2.0, for WiFi/Bluetooth Module) 2x M.2 3052 B-Key w/ Dual-SIM (USB 3.0 + USB 2.0, for LTE/5G Module) 1x M.2 2280 M-Key (PCIe [x4]), support NVME PCIe [x4] SSD)
INTERFACE	
Ethernet	1x 2.5GbE LAN (Intel® I226-LM) 4x 2.5GbE PoE LAN (IEEE802.3 at/af, sharing 60W of power budget for every four PoE ports)
USB	2x USB 3.2 Gen 2 (Type-A) 2x USB 2.0 (Type-A)
COM	2x DB-9 Male for RS-232/422/485
Digital I/O	1x DB-15 Male for DIO 8 bit
Video	2x HDMI 1.4b
Audio	1x Jack for Line-out & Mic-in
Power	1x 3-pin terminal block
Other	1x DB-9 Male for Isolated CANBus FD x 2 4x SIM slot
ENVIRONMENTAL	
Chassis	Multi PoE form factor
Cooling	Fanless
Power Adapter	IS: DC-in 9~36V x 1 for 3-pin Terminal Block VS: DC-in 9~36V x 1 for 3-pin Terminal Block with power ignition
Remote Control & LED	1x Reset Button 1x Power Button 1x DIP switch
Operating Temperature	-40°C ~ 70°C, IEC68-2 with 0.5 m/s AirFlow
Storage Temperature	-40˚C ~ 80˚C
Vibration / Shock Resistance	Vibration: MIL-STD-810H Shock: MIL-STD-810H
Humidity	5 ~95% @ 40°C, non-condensing
Dimensions	240 (W) x 167.1 (D) x 76 (H) mm (w/o brackets); 297 (W) x 167.1 (D) x 83 (H) mm (with brackets)
Weight	3.6kg
Mounting	Wallmount
Certifications	CE/FCC Class A, UKCA, E-Mark

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Ordering Information	VPC-5640S-IS-A10-00	VPC-5640S-VS-A10-00
AI Accelerator	Intel® Core™ i7-1265UE	
RAM	-	
Cooler	Fanless	
Storage	M.2 2280 M-Key x 1 (PCIe [x4]) 2.5" SATA Drive Bay x 1	
RAID Support	-	
Display	2x HDMi	
LAN	1x 2.5GbE	
PoE	2.5GbE POE/PSE 802.3 af/at x 4 (Max. 60W)	
USB	2x USB 3.2 Gen 2 2x USB 2.0	
RS-232	-	
RS-232/422(485	2x	
Expansion Slot	1x M.2 2280 M-Key 1x M.2 2230 E-Key 2x M.2 3052 B-Key w/ Dual-SIM	1x M.2 2280 M-Key 1x M.2 2230 E-Key 2x M.2 3052 B-Key w/ Dual-SIM Built-In GPS NEO-M9V module
Power	DC 9-36V	DC 9-36V ignition

Optional Accessories	
1702031803	Power Cord. 3P-250V 10A 180D.1.8M.VDE.FAN-JET.YP-22/YC-12 (Euro)
1702031802	Power Cord. 3P-125V 10A 180D.1.8M.USA.FANJET.YP12/YC-12 (USA)
170203180E	Power Cord. 3P. 125V/7A. 1. 8M. PSE YP12/YC12 Certificat (JPN)
1255X00059	120W Power Adapter