











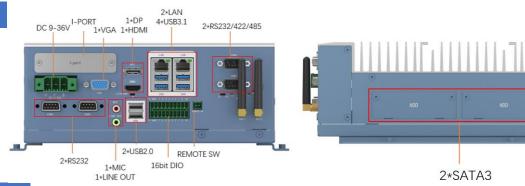
#### **Key Features**

- Intel® 8<sup>th</sup> /9<sup>th</sup> Gen Coffee lake LGA1151 CPU
- Intel® H310 Chipset
- 2\*DDR4 2400/2666MHz SODIMM, up to 64GB
- 1\*DP, 1\*HDMI and 1\*VGA, tri-display
- 2\*LAN, 4\*USB3.1, 2\*USB2.0, 16bit Iso. DIO
- 2\*RS232/422/485 and 2\*RS232
- 1\*M.2 E-key 2230, supports Gigabit WIFI module
- 2\*2.5-inch SATA bay and 1\*mSATA
- Wide power input 9-36V, with short circuit, over voltage and over current protection

#### **Product Overview**

KMDA-5610 is a fanless high-performance box computer with H310 chipset, powered by Intel® 8th /9th Gen Coffee lake CPU has complete IO function, wide voltage DC power supply and moderate size. It is suitable for industrial automation, highway tolling, security monitoring and environmental detection and other industries and fields.

### **IO Layout**

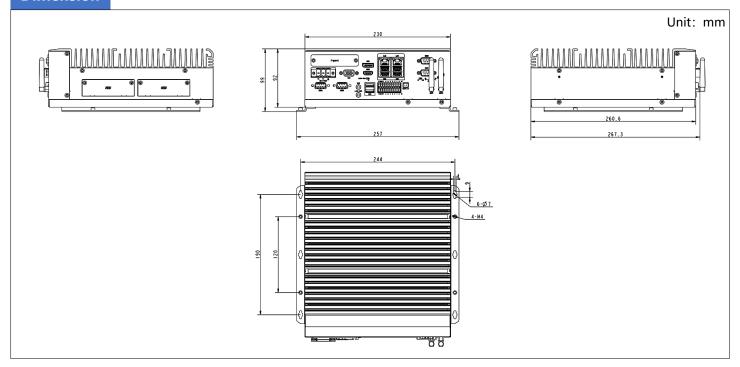


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Product SPE		
CPU+PCH	Intel® Coffee lake 9th/8th-Gen Core™ i9/i7/i5/i3/Pentium/Celeron LGA1151 CPU, Intel® H310 PCH	
System memory	2*260-Pin SODIMM, dual-channel DDR4 2666/2400MHz, up to 64GB	
Expansion	1*M.2 E-Key 2230 with PCIeX1 and USB2.0 signals, expandable Gigabit WIFI and Bluetooth modules 1*full size Mini-PCIe with SIM card slot, with SATA3.0 and USB2.0 signal, pluggable mSATA storage, or expandable 4G LTE module	
Graphics	Intel UHD Graphics, Supports DirectX11.1, OpenGL 5.0 and OpenCL 2.1, DP max res. 4096*2304@60Hz, HDMI max res. 4096*2160@24Hz, VGA max res. 1920*1200@60Hz 2 independent displays, 1 copy display	
Audio	Optional Realtek ALC662 controller, support 5.1 channel	
LAN	1*Intel I211AT and 1*Intel I219LM Gigabit network, full PCIe X1 bandwidth, 10M/100M/1000Mbps adaptive, supports WOL	
Storage	2*2.5" SATA3 easy pluggable SATA bay, support max 6G bit/s transmission rate 1*full size Mini PCIe (SATA3.0+USB2.0 signals ), supporting mSATA storage disk	
I/O Interface	2*RJ45 Gig-LAN; 4*USB3.1 Type A (up to 5G bit/s); 2*USB2.0 Type A and 2*built-in USB2.0 pin; 2*RS232/422/485 set through BIOS (DB9 Male), 2*RS232(DB9 male); 16bit Iso. DIO(2*10pin Phoenix plug) and 16bit non-isolated DIO(2*10 DuPont pin); 1*VGA+1*DP+1*HDMI; 1*Line out+1*Mic (3.5mm phone jack)	
I-port	Support the export of built-in 16bit DIO, 2*USB2.0 or M.2/Mini PCIe and other expansion interfaces	
DIO	16bit iso DIO, 8bit Iso. DI(High:5-24V,Low:0-1.5V) and 8bit Iso. DO(200mA)	
LED	1*Power LED (on the power button), 1*HDD LED, 3*CPU temp LED (Red is warning, Yellow is high, Green is normal)	
Control SW	1*Power SW, 1*Remote SW, 1*AT/ATX SW, 1*Clear CMOS SW	
Power supply	DC IN 9-36V, 3-pin Term. 7.62mm, with short circuit, over voltage and over current protection TDP: 60.5W(i7-8700T CPU/32G DDR4/128G SSD)	
Security	Supports TPM (optional)	
Watchdog timer	Watchdog timeout programmable via software 1 to 255 second	
OS	Windows 10 Enterprise & IOT Enterprise (64 bit) (CFL-R) Ubuntu、SuSe、Redhat Enterprise 1,2 (Kernel 4.14) (CFL-R) Wind River VxWorks 7 (CFL-R)	

Mechanical	Aluminum-magnesium alloy, SGCC frame
Color	Pigeon blue + White aluminum grey
Mounting	Desktop Mounting
Dimension	(L*W*H): 230*267.3*92mm
Net weight	5.1 kg
Operating temperature	-20 $\sim$ 60°C, SSD, air flow -10 $\sim$ 55°C,HDD, air flow
Storage temperature	-40°C~85°C
Storage humidity	10~95%@40°C, Non-condensing
Vibration	5grms/5~500Hz/random/in working(SSD); 1grms/5~500Hz/random/in working(HDD)
Shock	50g peak acceleration(11ms duration)(SSD); 20g peak acceleration(11ms duration)(HDD)
EMC/ Certification	CE/FCC Class A

## Dimension



# Ordering Info.

Model No.	Introduction	
KMDA-5610-S001	Fanless box computer, Intel® 8 <sup>th</sup> /9 <sup>th</sup> Gen Coffeelake LGA1151 CPU, H310 PCH, 2*DDR4 SODIMM, 2*LAN, 4*USB3.1, 2*USB2.0, 4*COM, M.2 E-Key, 1*VGA, 1*DP, 1*HDMI, Audio Line out & Mic, 16bit iso. DIO, 2*2.5" SATA bay, 1*Mini PCIe(mSATA), DC 9-36V.	
PA-120DC19	AC/DC power adapter, DC 19V/6.32A, 120W	
AC-140	8bit iso input, 8bit power relay output terminal board, DC 12V, the source signal is a 16bit TTL signal GPIO	

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