KMDA-5921-S001

Intel® 8th/9th Gen Coffee Lake LGA1151 CPU,
2*LAN, 4*USB3.1, 1*VGA, 1*DP, 1*HDMI,
4*COM, 16bit Iso.DIO, 2*PCIe+2*PCI,1*mSATA,
2*SATA3.0, DC 9-36V.

JHCTECH

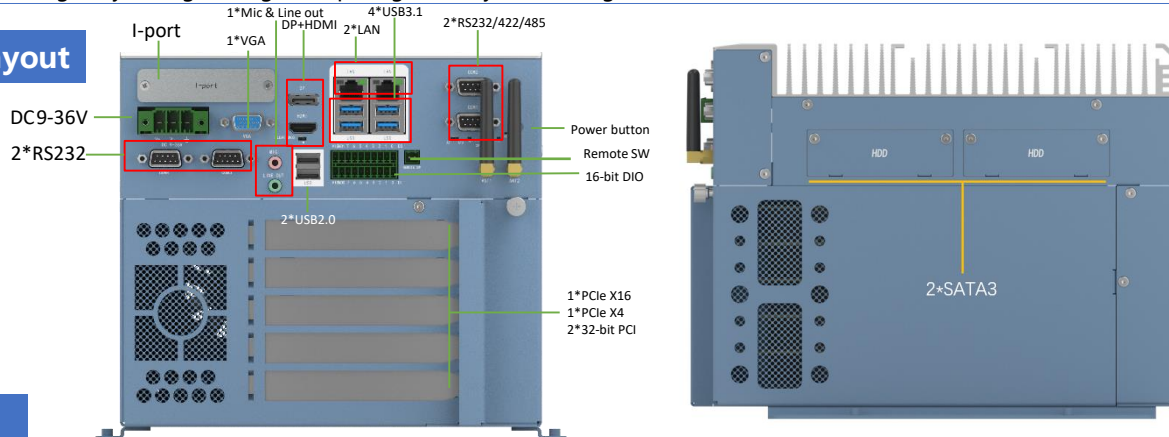IoT Computer
Connecting the Dots

Key Features

- Intel® 8th/9th Gen Coffee lake LGA1151 CPU
- Intel® H310 PCH
- 2*DDR4 2400/2666MHz SODIMM, up to 64GB
- 1*DP, 1*HDMI, 1*VGA, tri-display
- 2*LAN, 4*USB3.1, 2*USB2.0, 16bit Iso.DIO
- 2*RS232/422/485 and 2*RS232
- 1*PCIeX16+1*PCIeX4 (X2 signal)+2*PCI Quad expansion
- 1*M.2 E-key 2230, supports Gigabit WIFI module
- 2*2.5-inch SATA bay and 1*mSATA
- Wide power input DC 9-36V, with short circuit, over voltage and over current protection

Wi-Fi 6
intel Coffee Lake
4K Ultra HD
Fanless

RoHS COMPLIANT 2002/95/EC CE FCC

Product Overview

KMDA-5921 is a fanless high-performance box computer with H310 chipset, powered by Intel® 8th /9th Gen Coffee lake CPU has complete IO function, dual PCIe plus dual PCI quad expansions, wide voltage DC power supply and moderate size. It is suitable for industrial automation, highway tolling, AI edge computing, security monitoring and environmental detection and other industries and fields.
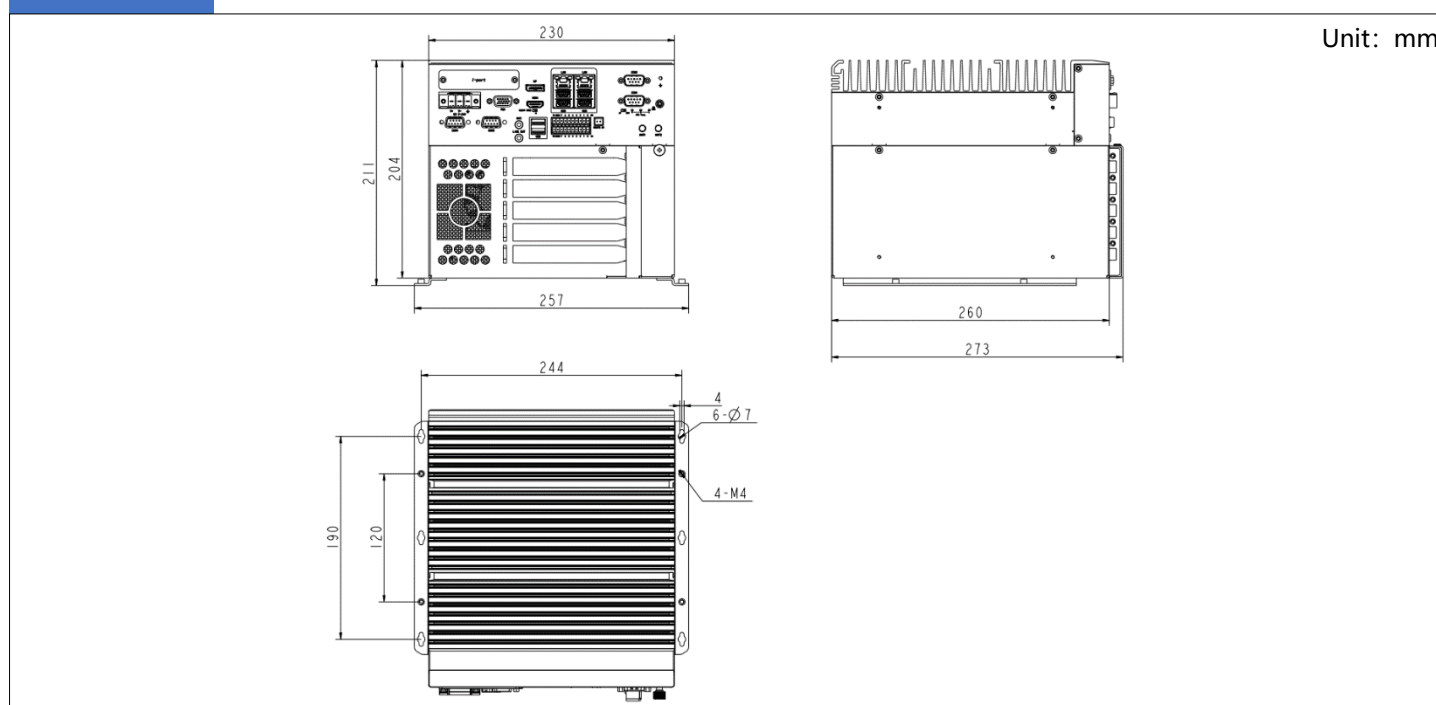
IO Layout

I-port
1*Mic & Line out
DP+HDMI
1*VGA
4*USB3.1
2*LAN
2*RS232/422/485
DC9-36V
2*RS232
Power button
Remote SW
16-bit DIO
2*USB2.0
1*PCIe X16
1*PCIe X4
2*32-bit PCI
HDD
HDD
2*SATA3

SPEC

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; 1*PCIeX16 (X16 signal from CPU) gen3.0+1*PCIe X4(X2 signal from PCH) gen2.0, support a maximum power consumption of 150W GPU or AI accelerator card (card length is less than 210mm) or other function card (card length is less than 230mm); 2*32bit standard PCI slot
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 ports	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, no accelerator card or function card）
Security	Supports TPM (optional)
Watchdog Timer	Watchdog timeout programmable via software 1 to 255 second
OS Support	Windows 10 Enterprise & IOT Enterprise, Ubuntu,SUSE,Redhat Enterprise 1,2 (Kernel 4.14) , VxWorks 7

Structure	Aluminum-magnesium alloy, SGCC frame
Color	Pigeon blue + White aluminum grey
Mounting	Desktop Mounting
Dimension	(L*W*H)：230*273*204mm
Net weight	7.25 kg
Operating temperature	-20～60℃, SSD, air flow -10～55°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)
Certification/EMC	CE/FCC Class A

Dimension

Unit：mm

Ordering Info.

Model No.	Introduction	Expansion
KMDA-5921-S001	Fanless box computer, Intel® 8th /9th 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), 1*I-port, DC 9-36V.	Standard configuration: ECX-266 four expansion card, 1*PCIeX16 (X16 signal) +1*PCIeX4 (X2 signal) +2*32bit PCI
PA-120DC19	AC/DC power adapter，DC 19V/6.32A,120W	
PA-220DC24	AC/DC power adapter，DC24V@9.17A ,220W	
PA-300DC24	AC/DC power adapter，DC24V@12.5A ,300W	
AC-140	8bit isolating input and 8bit power relay output terminal board，DC 12V, signal is 16bit TTL GPIO	