

# IPC-320

## Compact Size Tower IPC Supporting Intel® Core™ i 12<sup>th</sup>/13<sup>th</sup>/14<sup>th</sup> Gen Processor & Intel® Core™ Processor Series 2 (LGA 1700) with Built-in AC PSU

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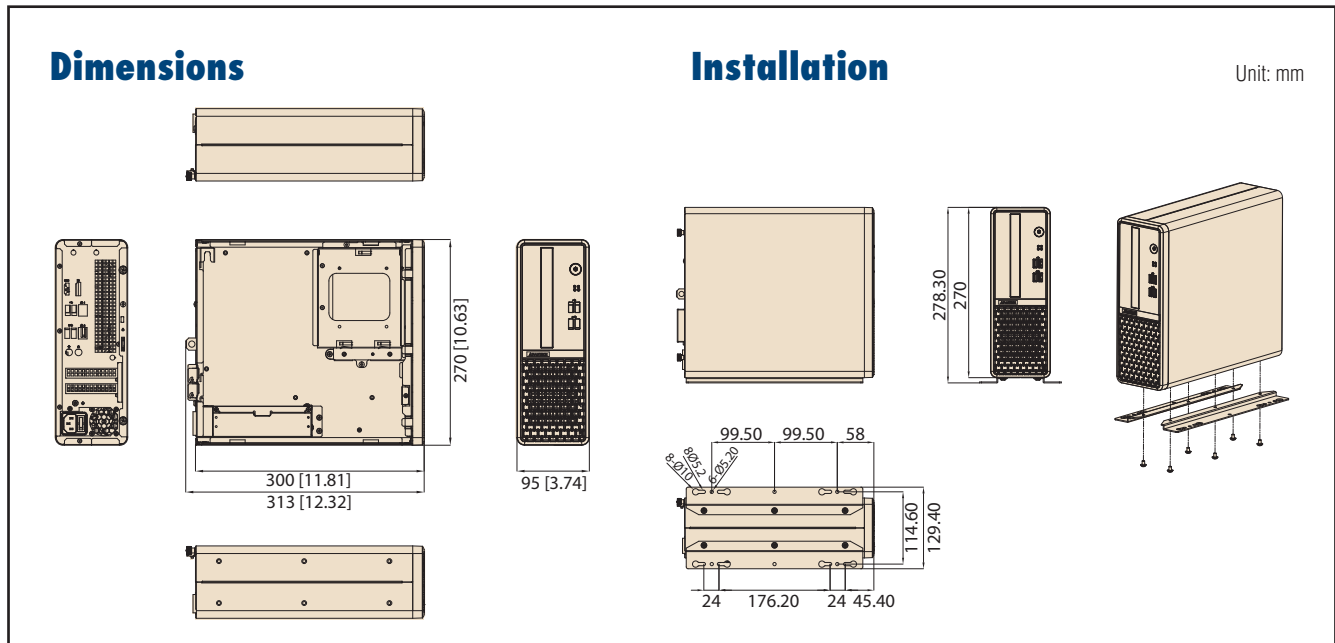


### Features

- Supporting Intel® Core™ i 12<sup>th</sup>/13<sup>th</sup>/14<sup>th</sup> Gen Processor & Intel® Core™ Processor Series 2 (LGA 1700) with Q670E chipset
- Design for operator IPC and application with space limit
- Quad USB port on both front and rear side
- Dual Independent Display (HDMI/ DP)
- 2 low profile Expansion slots (PCIe x16 and PCIe x4)
- Built in with 250W 12V and 5V output only single power supply
- Qualified for Amazon Web Service(AWS) IoT Greengrass

### Specifications

Intel® Core™ Processors Series 2 (Bartlett Lake-S)	CPU	251E	251TE	221E	221TE	211E	211TE	211EF	201E	201TE	300	300T		
	P-core Base Frequency	2.1 GHz	1.4 GHz	2.7 GHz	1.8 GHz	2.7 GHz	1.7 GHz	2.7 GHz	3.6 GHz	2.9 GHz	3.9 GHz	3.4 GHz		
	L3 Cache	36 MB	36 MB	24 MB	24 MB	20 MB	20 MB	20 MB	12 MB	12 MB	6 MB	6 MB		
	Cores	24	24	14	14	10	10	10	4	4	2	2		
14th Generation Processors	CPU	i9-14900	i9-14900T	i7-14700	i7-14700T	i5-14500	i5-14500T	i5-14400	i5-14400T	i5-14400F	i3-14100	i3-14100T		
	P-core Base Frequency	2.0 GHz	1.1 GHz	2.1 GHz	1.3GHz	2.6 GHz	1.7 GHz	2.5 GHz	1.5 GHz	2.5 GHz	3.5 GHz	2.7 GHz		
	L3 Cache	36 MB	36 MB	33 MB	33 MB	24 MB	24 MB	20 MB	20 MB	20 MB	12 MB	12 MB		
	Cores	24	24	20	20	14	14	10	10	10	4	4		
13th Generation Processors	CPU	i9-13900(E)	i9-13900TE	i7-13700(E)	i7-13700T(E)	i5-13500(E)	i5-13500T(E)	i5-13400(E)	i3-13100(E)	i3-13100T(E)				
	P-core Base Frequency (Up to)	2.0 GHz	1.1 GHz	2.1 GHz	1.4 GHz	2.5 GHz	1.6 GHz	2.5 GHz	3.4 GHz	2.5 GHz				
	L3 Cache	36 MB	36 MB	30 MB	30 MB	24 MB	24 MB	20MB	12 MB	12 MB				
	Cores	24	24	16	16	14	14	10	4	4				
12th Generation Processor	CPU	i9-12900(E)	i9-12900TE	i7-12700(E)	i7-12700TE	i5-12500(E)	i5-12400	i5-12500TE	i3-12100(E)	i3-12100TE	Pentium G7400E	Pentium G7400TE	Celeron G6900E	Celeron G6900TE
	Base Frequency	2.4GHz	2.3GHz	2.1 GHz	1.4 GHz	2.9 GHz	2.5GHz	1.9 GHz	3.2 GHz	2.1 GHz	3.6 GHz	3.0 GHz	3.0 GHz	2.4 GHz
	L3 Cache	30MB	30MB	25MB	25MB	18 MB	18 MB	18 MB	12 MB	12 MB	6 MB	6 MB	4 MB	4 MB
	Cores	16	16	12	12	6	6	6	4	4	2	2	2	2
	TDP	65W	35W	65W	35W	65W	35W	35W	65W	60 W	46W	35W	46W	35W
	Socket	LGA 1700												
	Temperature	0 - 40 °C												
	Chipset	Q670E												
	BIOS	AMI 256MB SPI Flash												
	Expansion slot	PCIeX4 (Gen 3)	1 (Max. card length 170 mm)											
		PCIeX16 (Gen 4)	1 (Max. card length 170 mm)											
	Memory	Technology	Dual Channel (Non-ECC) DDR4 3200 MHz											
		Max Capacity	64 GB											
Sockets		2 x 288-pin DIMM												
Graphics	Controller	Chipset integrated Intel HD Graphics												
	VRAM	Shares system memory is subjected to OS												
Ethernet	Interface	10/100/1000/2.5G Mbps (2.5G for LAN2 only)												
	Controller	GbE LAN1: Intel I219-LM; GbE LAN2: Intel I226-V												
	Connector	2 x RJ-45												
SATA	Max. Data Transfer Rate	600 MB/s												
	Channel	3												
Front Panel I/O and Miscellaneous	USB	4 x USB 3.2 Gen1												
	LED Indicators	PWR, HDD												
Rear I/O	HDMI	1 (Resolution up to 4096 x 2160 @ 60Hz)												
	DP 1.2	1 (Resolution up to 4096 x 2304 @ 60Hz)												
	Ethernet	2												
	USB	4 (2 x USB 3.2 Gen 1, 2 x USB 2.0)												
	Audio	2 (Line-out , Mic-in )												
Internal connectors	USB type A	1												
	SATA	3												
	M.2	M key (link x4)												
Drive bay	mSATA	1												
	Slim Optical Drive	1												
System Cooling	3.5"	1 (For single 2.5" or 3.5" HDD/SSD, no need 989K008734 bracket) (For dual 1: 9.6mm 2.5" HDD/SSD, order 989K008734 bracket)												
	System Fan	NA (Optional as 98R)												
Environment	Air filter	NA (Optional as 98R)												
	Temperature	Operating 0 - 40 °C									Non-Operating -20 - 60 °C			
	Humidity	85% RH@ 40 °C, non-condensing									95% RH @ 60 °C, non-condensing			
	Vibration (5-500Hz)	1 Grms												
	Shock	10G (with 11ms duration, hal sine wave)												
System security monitoring		Chassis intrusion switch (Optional)												
		Padlock hoop												
		Kensington cable lock slot												
Physical Characteristics	Dimension (W x H x D)	95 x 270 x 300 mm (3.74 x 10.63 x 11.81 inch)												
	Weight	3.306 kg (7.289 lb)												
EMC Emission Class		EMI class B												

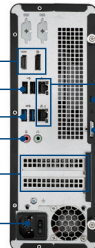


**Front View**



- Slim ODD opening
- Power on/off switch
- LED indicators (PWR / HDD)
- USB 3.2 x 4

**Rear View**



- Dual displays (DP and HDMI)
- USB 2.0 x 2
- USB 3.2 x 2
- Line-out, Mic-in
- Low profile expansion slots (PCIe x16 and PCIe x4)
- 250W 12V and 5Vsb output single power supply
- Dual LAN
- Kensington cable lock slot
- Padlock hoop

**Inside View**



- Intrusion switch (optional)
- AIMB-308, Intel 12th / 13th / 14th gen proprietary motherboard
- Drive bay for 3.5" HDDx1 or 2.5" HDDx1<sup>\*Note1</sup>

\*Note 1 : Choose convert bracket 989K008734 to have 2x2.5" HDD installed.

**Ordering Information**

Part number	Compatible motherboard	Compatible CPU cooler	HDD / SSD bay	Power supply wattage
IPC-320-25A	AIMB-308Q-00A1	1970005436T001	1 x 3.5" or 2 x 2.5" (T:9.6 mm)	250W

Part number	Chipset	PCIex16	PCIex4	SATA	GbE	USB 3.2	USB 2.0	COM	mSATA	M.2
AIMB-308Q-00A1	Q670E	1	1	3	2	4 (front) 2 (rear)	2 (rear) 1 (internal type A)	2	1	M key (link x 4)

**Packing List**

**IPC-320**

Item	Description	Qty
IPC-320	Compact tower computer chassis	1
	Screws	one bag
1960005359T005	Mounting bracket	a pair
1700018785-11	SATA power cable for storage	1
96PS-A250WFXB12	250W (12V and 5Vsb output only)single power supply	1

**AIMB-308Q**

Item	Description	Qty
AIMB-308	AIMB-308Q proprietary motherboard	1
2041030800	Start up Manual for AIMB-308	1
1700018971	SATA data cable 15 cm	1

**Optional Accessories**

Part number	Description
1970005436T001	CPU cooler LGA1700-65W (Side blow)
98R13200002	Fan Guide used with 1970005436T001
98R13200001	Fan kit (including 8 cm fan, fan cable, fan filter, fan guard, screws)
1700018785-11	SATA power cable 35cm for storage
1700023646-01	SATA power cable 30cm for Slim ODD
989K008734	Convert frame bracket to fix two 2.5" HDDs/SSDs in a 3.5" drive space
1700033647-01	Intrusion switch (Case open) cable
PCA-TPMSPI-00A1	TPM2.0 module via SPI interface
1700023378-21	1-port COM cable, box header to DB9

\* Note : Use recommend CPU Cooler & Fan guide for stable system thermal efficiency  
 \* Note : Always order 98R13200001(Fan kit) with installed add-on card application.