IPC-242

Compact size IPC with 10th Gen Intel® Core™ i CPU Socket (LGA 1200) and 250W ATX PSU



Features

- Intel 10th Gen Core i Desktop LGA 1200 CPU supported with Q470E/H420E chipset
- Compact design fit in small cabinet or limited space
- 2-3 Independent Display (HDMI/ VGA/ DP or DVI)
- 4 Expansion slots (PCIe/ PCI)
- Rich I/O: 2 x GbE, 6 x USB3.2, 1x NVMe M.2, 2 x SATAIII, 2 x RS-232/422/485 Serial Ports, 1 x Internal USB 2.0
- 1 x Swappable HDD/SSD Tray
- 250W Flex ATX Power Support
- Support Power Output 5V/12V (max. 2A)
- Dimension: 333(W) x 269.2(D) x 88(H) mm

Specifications

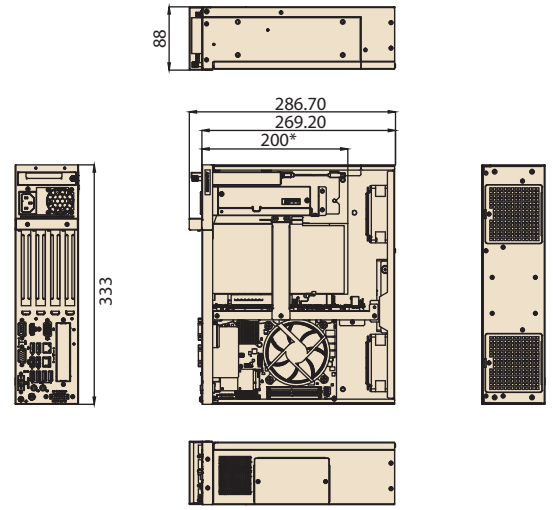
10th Generation Processor (TDP 35W)	CPU	I9-10900TE	I7-10700TE	I5-10500TE	I3-10100TE
	Core Number	10	8	6	4
	Base Frequency	1.80 GHz	2.00 GHz	2.30 GHz	2.30 GHz
	Max Turbo Frequency	4.50 GHz	4.40 GHz	3.70 GHz	3.60 GHz
	L3 Cache	20 MB	16 MB	12 MB	6 MB
	Temperature	0 ~ 45 °C			
	Chipset	Q470E/H420E			
	BIOS	AMI 256/128Mb SPI Flash			
10th Generation Processor (TDP 65W)	CPU	I9-10900E	I7-10700E	I5-10500E	I3-10100E
	Core Number	10	8	6	4
	Base Frequency	2.80 GHz	2.90 GHz	3.10 GHz	3.20 GHz
	Max Turbo Frequency	4.70 GHz	4.50 GHz	4.20 GHz	3.80 GHz
	L3 Cache	20 MB	16 MB	12 MB	6 MB
	Temperature	0 ~ 45 °C			
	Chipset	Q470E/H420E			
	BIOS	AMI 256/128Mb SPI Flash			
Memory	Technology	Dual-channel DDR4 2666/2933 MHz			
	Socket	2 x 260 pin DDR4 SODIMM			
	Maximum Capacity	Max up to 64GB (32GB Per DIMM)			
Display	VGA	CRT, up to 2048 x 1152 maximum resolution			
	HDMI	1 x HDMI, up to 4096 x 2160 maximum resolution @ 24 MHz			
	DP	1 x DP, up to 4096x2304 maximum resolution @ 60 MHz (Internal Pin Header via Cable)			
	Multiple Display	3 x independent displays (third display output (DP or HDMI or DVI-D) via optional cable (PCE-2132 only)			
Ethernet	Controller	PCE-2132: LAN1: Intel® i219LM, LAN2: Intel® i210AT PCE-2032: LAN1: Intel® i219V, LAN2: Intel® i210AT			
	Interface	2 x RJ45			
Storage	NVMe M.2	1 x PCIex4 M Key (PCE-2132 only)			
	HDD	2 x 2.5" HDD/SSD (Max 15mm Height)			
	mSATA/MiniPCIe	PCE-2132: 1 x MiniPCIe (PCIe/ SATA/USB) PCE-2032: 1 x mSATA (SATA only)			
	RAID	SW RAID 0/1/5/10 (PCE-2132 Only)			
I/O	USB	PCE-2132: 6 x USB3.2, 2 x USB2.0, 1 x Internal USB2.0 Type A, 2 x Internal USB2.0 PCE-2032: 6 x USB3.2, 2 x USB2.0, 1 x Internal USB2.0 Type A			
	Serial Port	2 x RS-232/422/485 support auto flow control			
	Audio	2 (1 x line out and 1 x mic in)			
Expansion	I/O Module	Support Advantech i-Door			
	Add-On-Card Module		PCIex16	PCIex4	PCI
		IPC-242-00A1	1	3	0
		IPC-242-01A1	1	1	2
LED and Switch	Button	Power			
	LED	1 x HDD Disk			
Power	Output Rating	AC 250W, ATX			
	Input Voltage	100-240V~/3.5A, 47-63Hz			
	DC Output Voltage	5V/12V (Max 2A Each)			
	Remote Power Switch	2-Pin Remote Power Switch Control			
Watchdog Timer	Output	System reset			
	Interval	Programmable 1 ~ 255 sec/min			
Environment		Operating			Non-operating
	Temperature	0 ~ 45 °C			-40 ~ 85 °C
	Humidity	95% @ 40 °C (non-condensing)			
	Vibration	With SSD: 1 Gms @ 5 ~ 500 Hz, random, 1 hr/axis With 2.5" HDD: 0.5Grms @ 5 ~ 500 Hz, random, 1 hr/axis			2G
	Shock	With SSD: 10G, IEC-68-2-27, half-sine wave, 11 ms duration			
Mechanical	Dimensions (W x D x H)	333 x 269.2 x 88 mm (13.11" x 10.55" x 3.46")			
	Weight	4.2kg			
	Installation	Table/wall mount			
Certifications	EMC	CE/FCC Class A, CCC			
	Safety	UL, CCC			

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All product specifications are subject to change without notice.

Dimensions

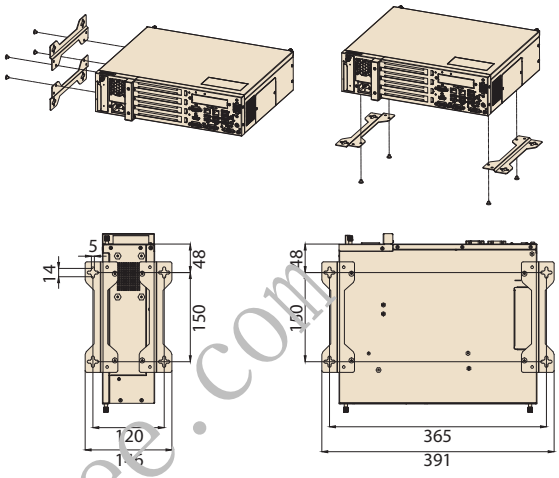
Unit: mm



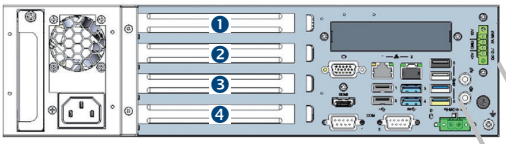
*Max. length for expansion modules

Installation

Unit: mm



Front View



IPC-242-00A1
IPC-242-01A1

Expansion Slot Order	IPC-242-00A1	IPC-242-01A1
1	PCIex4	PCI
2	PCIEx16	PCI
3	PCIEx4	PCIex16
4	PCIex4	PCIex4

Ordering Information

Part Number	Compatible MB	Chipset	PCIex16	PCIex4	PCI	HDD/SSD	AC Power
IPC-242-00A1	PCE-2132-00A1	Q470E	1	3	0	2 x 2.5" (1 x internal, 1 x swappable)	250W ATX
IPC-242-01A1	PCE-2132-00A1	Q470E	1	1	2		
	PCE-2032-00A1	H420E	1	1	2		

Part Number	Chipset	USB3.2	USB2.0 (External/Internal)	GbE	NVMe M.2	miniPCIe	COM
PCE-2132-00A1	Q470E	6	2/2	2	1 (PCIex4 M Key)	1 (Full-Size)	2
PCE-2032-00A1	H420E	6	2/0	2	0	1 (mSATA Only)	2

IPC-242 Packing List

Item	Description
IPC-242	Compact Industrial Computer Chassis
1960070543T007	Mounting Bracket
2001024200	User Manual for IPC-242
1652002205	Remote SW 2 pin Phoenix connector
1652005685	4-Pin Plug in 3.81mm DC output connector
1700018804	M CABLE SATA 7P/SATA 7P 90/90 25CM
1700007352	SATA POWER CABLE 15P/15CM
1960070543T007	MOUNTING BKT x2

PCE-2032/2132 Packing List

Item	Description
PCE-2032/2132	10th Gen Intel® Core™ i CPU (LGA 1200) CPU board
2041203200	Startup Manual for PCE-2032/2132

Optional Accessories

Part Number	Description
1960053207N001	CPU Cooler LGA1155 S-95W 92.9x92.9x46 4400RPM
1700008762	COM3/4 (RS-232) Cable+PCIe Bracket
1702002600	Power cord (USA) UL/CSA, 3-pin, 10A, 125V, 1.83 M, 180 D
1700022940-01	Power cord PSE, 3-pin, 7A, 125V, 3 m, DAC-ST01
1702002605	Power cord (EU) 2-pin, 10/16A, 220V, 1.83 M, 90 D
1700024858-01	POE Power Cable 2*2P-4.2/2*2P-4.2 15cm
1960097668N001	Vertical Rear Mounting BKT_UP
1960097669N001	Vertical Rear Mounting BKT_DOWN
98R12420000	HDMI port kit iDoor
98R12420010	DVI port kit iDoor
98R12420020	Display port kit idoor
PCA-TPM-00B1E	TPM 2.0 module

Note: The PCM series module requires a bracket (P/N : 1960065854N001) that must be ordered separately.

Embedded OS

Item	Description
20706WX9ES0140	img W10 19EL PCE-2032 64b 1809 ENU
20706WX9HS0126	img W10 19HL PCE-2032 64b 1809 ENU
20706WX9VS0130	img W10 19VL PCE-2032 64b 1809 ENU

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