

# AIEdge-X<sup>®</sup> 500

Industrial AI Computer Powered by 8th/9th Gen Intel<sup>®</sup> Core<sup>™</sup> Processor,  
with Large Storage and Intel<sup>®</sup> Movidius<sup>™</sup> Myriad<sup>™</sup> X VPU Card



## Main Features

- LGA1151 socket for 8th/9th Gen Intel<sup>®</sup> Core<sup>™</sup> processor (35W/65W/95W\*)
  - \* If 95W CPU is desired, please select P/N: 10W20X50001X0
- 4 x 2.5 inch HDD/SSD slot, supports RAID 0/1/5/10
- Expandable PCIe x16/PCIe x4/PCI slots, perfect for graphics cards
- Suitable for all kinds of AI applications
- 1 x Intel<sup>®</sup> I219-LM GbE PHY and 1 x Intel<sup>®</sup> I211 Gigabit Ethernet controller
- Supports Intel<sup>®</sup> AMT

## Product Overview

Powered by an 8th/9th Gen Intel<sup>®</sup> Core<sup>™</sup> processor, the AIEdge-X<sup>®</sup>500 GPU-enhanced edge PC handles powerful multimedia content. Its reliable platform is also ideal for video acquisition, offering a full-height, full-length PCIe x16 expansion slot that's designed to host different cards, such as frame grabbers and powerful graphics cards. One PCI slot and one PCIe x4 for add-on cards are also available. Not only does the AIEdge-X<sup>®</sup>500 offer stunning visuals for image projections and meets the demands of heavy imaging workloads, the expandable computer is also ideal for AI machine/deep learning, image optimization, machine vision, and other AI applications. The high-end PC additionally supports HDMI display, LAN ports, and USB 3.0 ports, while its four 2.5-inch HDD/SSD slots are perfect for AI applications requiring substantial storage.

## Specifications

### CPU Support

- Support following listed processor

Generation	Socket Type	CPU	Smart Cache	Cores	Threads	Base Frequency	TDP
8th	FCLGA1151	Intel <sup>®</sup> Core <sup>™</sup> i3-8100T	6M	4	4	3.1GHz	35W
8th	FCLGA1151	Intel <sup>®</sup> Core <sup>™</sup> i5-8500T	9M	6	6	2.1GHz	35W
8th	FCLGA1151	Intel <sup>®</sup> Core <sup>™</sup> i7-8700T	12M	6	12	2.4GHz	35W
9th	FCLGA1151	Intel <sup>®</sup> Core <sup>™</sup> i3-9100TE	6M	4	4	2.2GHz	35W
9th	FCLGA1151	Intel <sup>®</sup> Core <sup>™</sup> i5-9500TE	9M	6	6	2.2GHz	35W
9th	FCLGA1151	Intel <sup>®</sup> Core <sup>™</sup> i7-9700TE	12M	8	8	1.8GHz	35W
8th	FCLGA1151	Intel <sup>®</sup> Core <sup>™</sup> i3-8300	8M	4	4	3.7GHz	65W
8th	FCLGA1151	Intel <sup>®</sup> Core <sup>™</sup> i5-8500	9M	6	6	3.0GHz	65W
8th	FCLGA1151	Intel <sup>®</sup> Core <sup>™</sup> i7-8700	12M	6	12	3.2GHz	65W
9th	FCLGA1151	Intel <sup>®</sup> Core <sup>™</sup> i3-9300	8M	4	4	3.7GHz	65W
9th	FCLGA1151	Intel <sup>®</sup> Core <sup>™</sup> i5-9500	9M	6	6	3.0GHz	65W
9th	FCLGA1151	Intel <sup>®</sup> Core <sup>™</sup> i7-9700	9M	8	8	3.0GHz	65W
9th	FCLGA1151	Intel <sup>®</sup> Core <sup>™</sup> i7-9700K	12M	8	8	3.6GHz	95W
9th	FCLGA1151	Intel <sup>®</sup> Core <sup>™</sup> i9-9900K	16M	8	16	3.6GHz	95W

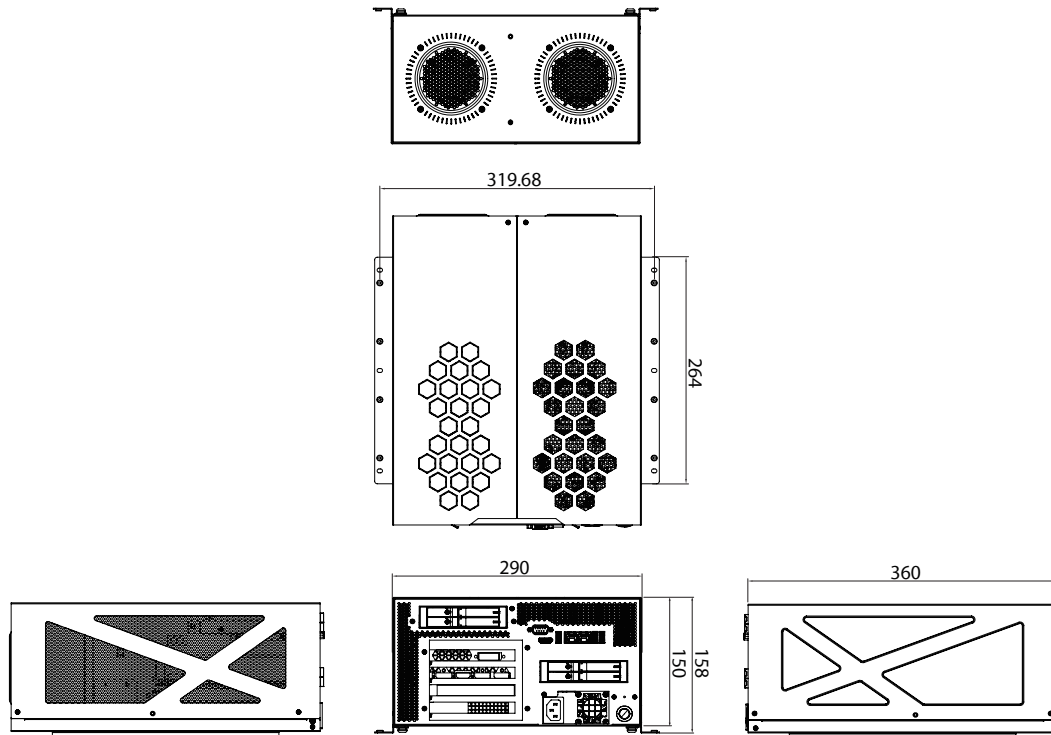
### Chipset

- Intel<sup>®</sup> PCH Q370

### Graphics

- Intel<sup>®</sup> HD Graphics 630 series

## System Architecture



### Main Memory

- 2 x 260-pin SO-DIMM sockets, supports DDR4 2400/2666 non-ECC, unbuffered memory up to 64G (single socket max. 32GB)

### I/O Interface – Internal

- 3 x COM, supports RS232
- 2 x USB 3.1 via box header
- 6 x USB 2.0 via JST connector
- 8-Channel GPIO

### I/O Interface – Front

- 1 x Power button with LED
- 1 x Reset button
- 1 x HDMI 2.0
- 2 x USB 3.0
- 1 x USB 2.0
- 2 x RJ45 with LEDs for Gigabit LAN (Intel® I219-LM GbE PHY and Intel® I211 Gigabit Ethernet controller)
- 1 x COM4, supports RS232/422/485

### Graphics & Display

- Intel® UHD Graphics 630 (internal)
- Optional Intel® Movidius™ Myriad™ X VPU card

### Graphics Card Dimensions

- Supports up to 327 x 140 x 55.6 mm card dimensions (350W GPU)

### Storage

- 4 x SATA 2.5" HDD/SSD with RAID 0/1/5/10
- M.2 2280 Key M (SATA/PCIe)

### Expansion

- 1 x PCIe x16 slot
- 1 x PCIe x4 slot
- 1 x PCI slot

### Power Supply

- 1 x internal 800W ATX power supply
- Input: 100VAC to 240VAC

- Output: +12VDC
- Supports AT/ATX via jumper setting (default: ATX)

### Environment

- Operating temperature: 0°C to 45°C (active cooling design)
- Storage temperature: -20°C to 80°C
- Humidity: 10 to 90% (non-condensing)
- Shock protection: 50G peak acceleration, 11 ms according to IEC60068-2-27
- Vibration protection:
  - Random: 2Grms @ 5~500 Hz, IEC60068-2-64 (with SSD)
  - Sinusoidal: 2G @ 5~500 Hz, IEC60068-2-6 (with SSD)

### Certifications

- CE Approval
- FCC Class A
- LVD

### Dimensions

- 360mm x 290mm x 150mm (L x W x H)

### Operating System Support

- Win10/Linux

## Ordering Information

### AIEdge-X®500 (P/N: 10W20X5000X0)

Industrial AI computer powered by 8th/9th Gen Intel® Core™ processor with large storage and optional Intel® Movidius™ Myriad™ X VPU card, supporting up to 65W CPU

### AIEdge-X®500 (P/N: 10W20X50001X0)

Industrial AI computer powered by 8th/9th Gen Intel® Core™ processor with large storage and optional Intel® Movidius™ Myriad™ X VPU card, supporting up to 95W CPU

### AIBooster®-X8 (P/N: 10E000AIB00X0)

Intel® Movidius™ Myriad™ X VPU PCIe deep learning accelerator card with heatsink and bracket