

# AIER1000 Series

## AI Education Solution

8th Gen Intel® Core™ i7-8700 Processor AI Education Solution



AIER102E

### Features

- A comprehensive AI deep learning and edge computing solution designed for educational providers
- Designed for collecting and analyzing student's behavior and engagement in the classroom through facial recognition
- Optimize teaching quality through classroom interaction analysis
- Facial Recognition - 98% face verification accuracy for 1:1
- Biometric identification - 6 kinds of student face emotion identification
- Behavior identification - 9 kinds of student behavior identification

### I/O View



AIER102E



AIER100C



### Specifications

| Model No.                   | AIER102E   | AIER100C   |
|-----------------------------|--|--|
| System Mainboard            | MI998AF-AI   |  |
| CPU Type                    | 8th Gen Intel® Core™ i7-8700 Processor 3.20GHz, TDP ≤ 65W  |  |
| CPU Socket                  | LGA1151  |  |
| Chipset                     | Q370 PCH   |  |
| Memory                      | 2x DDR4 SO-DIMM 2666/2400 MHz up to 32GB, default 2x 8GB   |  |
| Graphics                    | Intel® UHD Graphics 630  |  |
| LAN                         | 1x Intel® I219LM<br>1x Intel® I211AT   |  |
| Front Side External I/O     | 2x USB 2.0<br>1x Reset button<br>1x Power/HDD LED  |  |
| Rear Side External I/O      | 1x HDMI<br>4x USB 3.0<br>2x RJ45 Gigabit LAN<br>1x COM port RS232<br>1x AC-in  |  |
| Capture Card                | Video Input: 4x SDI<br>Max. FPS: 1920 x 1080p @60/50fps in → 1920 x 1080p @60/50fps out<br>Recording Video Resolution:<br>3G-SDI: 1920 x 1080p @60/50fps<br>HD-SDI: 1920 x 1080p @30/25/24fps<br>1920 x 1080i @60/50fps<br>1280 x 720p @60/50fps<br>SD-SDI: 720 x 480i @60fps<br>720 x 576i @50fps |  |
| Expansion Slots             | N/A  |  |
| Auto Control and Monitoring | Watchdog Timer: 256 segments, 0, 1, 2...255 (sec/min)  |  |
| Power Requirement           | AC 100~240V  |  |
| Construction                | Aluminum + SGCC  |  |
| Chassis Color               | Gray & white   | Blue & white   |
| Storage                     | 2x 2.5" SATA Devices, default 1x 128G SSD and 1x 500G HDD  | 2x 2.5" SATA Devices, default 1x 128G SSD and 1x 2TB HDD |
| Mounting                    | Standard system bracket  |  |
| Dimensions                  | 406mm(W) x 345mm(D) x 93mm(H)<br>462.8mm(W) x 345mm(D) x 98mm(H) with desktop mounting kit   |  |
| Weight                      | 8kg (17.64lbs)   |  |

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|                       |                              |
|-----------------------|------------------------------|
| Operating Temperature | 0°C ~ 45°C (32°F ~ 113°F)    |
| Storage Temperature   | -20°C ~ 80°C (-4°F ~ 176°F)  |
| Relative Humidity     | 10% ~ 90% (non-condensing)   |
| Certification         | CE/FCC Class-A               |
| Operating System      | Windows 10 64-bit Enterprise |

### Full HD Camera Specifications

|                  |  |
|------------------|--|
| Image Sensor     | 1/3 inch Progressive CMOS  |
| Sensor Size      | 5.346 x 3.003mm (16:9)   |
| Effective Pixels | Horizontal: 1920, Vertical: 1080   |
| Pixel Size       | 2.75um x 2.75um  |
| Resolution       | 1080p / 1080i: 1920 x 1080<br>720p & 720i: 1280 x 720  |
| Resolution/Rate  | 1080 60p/ 59.94p/ 50p/ 30p/ 29.97p/ 25p<br>1080 60i/ 59.94i/ 50i<br>720 60p/ 59.94p/ 50p/ 30p/ 25p |
| Output           | HD-SDI/ 3G-SDI (1 BNC)<br>HDMI 1.3a  |
| Color Space      | 4:2:2 (YCbCr) 10 bit   |
| Camera Control   | RS-485, OSD Button   |
| Operation Temp   | 32°F ~ 104°F   |
| Dimension        | 49mm x 49mm x 71mm (with default 3.6mm lens)   |
| Weight           | 180g/0.39Lbs (With default 3.6mm Lens)   |
| Power            | 30W/ 12V DC  |

### Packing List

| Model No.    | AIER102E  | AIER100C                  |
|--------------|---|---------------------------|
| Mounting Kit | Wall mount kit and screws   | Wall mount kit and screws |
| Power        | Power cord for System   | Power cord for System     |
| Camera Kit   | 2x AIDA SDI interface, Full HD cameras<br>2x 12V power adapters and Power cables<br>2x SDI 20M cables | None                      |



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### Ordering Information

|          |  |
|----------|--|
| AIER102E | Artificial Intelligence System for education edge side solution, w/ Intel® Core™ i7-8700 (3.2GHz/4.6GHz) CPU, 2x 8GB DDR4 Memory, 1x 2.5" 128GB SSD & 1x 2.5" 500G SATA III HDD, PCI-E SDI Capture Card, 2x FHD Cameras Kits, Edge side A.I. SDK & WIN10 IoT LTSE 2016 High End OS, 100V~240V AC |
| AIER100C | Artificial Intelligence System for education Central Management Server, w/ Intel® Core™ i7-8700 (3.2GHz/4.6GHz) CPU, 2x 8GB DDR4 Memory, 1x 2.5" 128GB SSD & 1x 2.5" 2TB HDD, Central Management Server A.I. SDK & WIN10 IoT LTSE 2016 High End OS, 100V~240VAC                                  |

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### Dimensions

