

# ACO-6010-16P-M12

Surveillance Applied System with LGA 1151 socket for 6<sup>th</sup> Gen. Intel® Core™ i7/i5/i3 or Pentium® / Celeron® Desktop Processor, 2x LAN, 16x M12 PoE

## FEATURES

- LGA 1151 socket for 6<sup>th</sup> Gen. Intel® Core™ i7/i5/i3 or Pentium® / Celeron® Desktop Processor
- Intel® Q170 Chipset
- 2x 260-pin DDR4 SODIMM. Max up to 32GB
- Triple independent display supported by 1x DVI-I and 2x DisplayPort
- 2x Intel® GbE supporting Wake-on-LAN and PXE
- 16x Intel® GbE with M12 PoE function
- 4x 2.5" SATA HDD bay and 2x mSATA supporting RAID 0, 1, 5, 10
- 3x Full-size mini PCIe for communication or expansion modules, 3x SIM socket
- 5x RS-232/422/485 (w/ 3x internal), 6x USB 3.0, 2x USB 2.0 (internal)
- 8x DI + 8x DO with Isolation
- 2x Universal Bracket (For mini PCIe application)
- 9 to 48VDC wide range power input supporting AT/ATX mode
- -25°C to 70°C extended operating temperature
- Power ignition management



## SPECIFICATIONS

### SYSTEM

|                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Processor      | Support 6 <sup>th</sup> Gen Intel® Core™ i3 / i5 / i7 Desktop Processor (LGA 1151) <ul style="list-style-type: none"><li>- 6<sup>th</sup> Gen Intel® Core™ i7-6700TE, Quad Core, 8MB cache, up to 3.4 GHz</li><li>- 6<sup>th</sup> Gen Intel® Core™ i5-6500TE, Quad Core, 6MB Cache, up to 3.3 GHz</li><li>- 6<sup>th</sup> Gen Intel® Core™ i3-6100TE, Dual Core, 4MB Cache, 2.7 GHz</li><li>- Intel® Pentium G4400TE, Dual Core, 3MB Cache, 2.4 GHz</li><li>- Intel® Celeron G3900TE, Dual Core, 2MB Cache, 2.3 GHz</li></ul> |
| System Chipset | Intel® Q170 Express Chipset                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| LAN Chipset    | GbE1: Intel® I210-AT (Support Wake-on-LAN and PXE)<br>GbE2: Intel® I219LM (Support Wake-on-LAN and PXE)<br>GbE3~GbE18: Intel® I350-AM4                                                                                                                                                                                                                                                                                                                                                                                          |
| Audio Codec    | Realtek ALC888S                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| System Memory  | 2x 260-Pin DDR4 1866/2133MHz SODIMM. Max. up to 32GB                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| BIOS           | AMI 128Mbit SPI BIOS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Watchdog       | Software Programmable Supports 1~255 sec. System Reset                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

### DISPLAY

|                  |                               |
|------------------|-------------------------------|
| VGA              | Yes (by optional split cable) |
| DVI              | 1x DVI-I                      |
| DisplayPort      | 2x DisplayPort                |
| Multiple Display | Triple Display                |

### STORAGE

|            |                                                                                             |
|------------|---------------------------------------------------------------------------------------------|
| SSD/HDD    | 2x Internal 2.5" SATA HDD Bay<br>2x Removable 2.5" SATA HDD Bay<br>Support RAID 0, 1, 5, 10 |
| mSATA      | 2x mSATA (Shared by 2x Mini PCIe)                                                           |
| SIM Socket | 2x External SIM socket<br>1x Internal SIM socket                                            |

### EXPANSION

|                  |                        |
|------------------|------------------------|
| Mini PCI Express | 3x Full-size Mini PCIe |
|------------------|------------------------|

### OPERATING SYSTEM

|         |                                                  |
|---------|--------------------------------------------------|
| Windows | Windows 10, Windows 8.1, WES8.1, Windows 7, WES7 |
| Linux   | Linux kernel 4.X                                 |

### I/O

|                       |                                                                                    |
|-----------------------|------------------------------------------------------------------------------------|
| COM                   | 2x RS-232/422/485<br>3x RS-232/422/485 (internal)                                  |
| USB                   | 6x USB 3.0<br>2x USB 2.0 (internal)                                                |
| LAN                   | 2x GbE RJ45                                                                        |
| PoE                   | 16x IEEE 802.3at (25.5W) GbE M12 (module)<br>160W total power budget               |
| Audio                 | 1x Mic-in, 1x Speaker-out                                                          |
| DIO                   | 8 in / 8 out (Isolated)                                                            |
| Universal I/O Bracket | 2x Universal I/O Bracket (For mini PCIe application)                               |
| Others                | 6x WiFi Antenna Holes<br>1x Power Switch, 1x AT/ATX Switch, 1x Remote Power On/Off |

### POWER

|                        |                                                                                      |
|------------------------|--------------------------------------------------------------------------------------|
| Power Mode             | AT, ATX                                                                              |
| Power Supply Voltage   | 9~48VDC                                                                              |
| Power Ignition Sensing | Power Ignition Management                                                            |
| Power Connector        | 3-pin Terminal Block                                                                 |
| Power Adaptor          | Optional AC/DC 24V/9.2A, 220W                                                        |
| Power Protection       | OVP (Over Voltage Protection)<br>OCP (Over Current Protection)<br>Reverse Protection |

### ENVIRONMENT

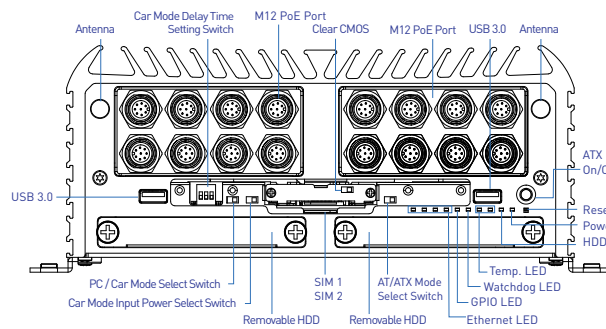
|                           |                                                                                        |
|---------------------------|----------------------------------------------------------------------------------------|
| Operating Temp.           | -25°C to 70°C                                                                          |
| Storage Temp.             | -30°C to 85°C                                                                          |
| Relative Humidity         | 10% to 95% (non-condensing)                                                            |
| Vibration                 | With SSD: 5 Grms, 5 - 500 Hz, 0.5 hr/axis<br>With HDD: 1 Grms, 5 - 500 Hz, 0.5 hr/axis |
| Shock                     | With SSD: 50G, half sine, 11ms                                                         |
| Standards / Certification | CE, FCC Class A, E-Mark, EMC Conformity with EN50155 & EN50121-3-2                     |

### PHYSICAL

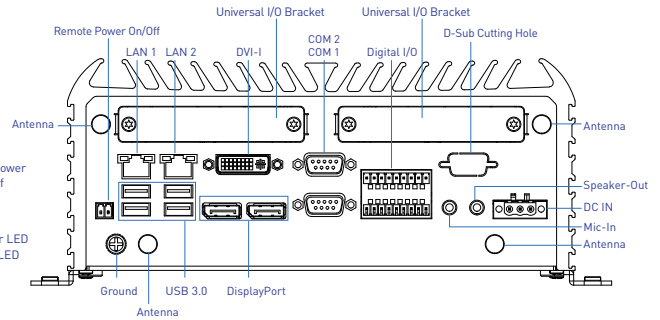
|              |                                         |
|--------------|-----------------------------------------|
| Construction | Extruded Aluminum with Heavy Duty Metal |
| Dimension    | 240 (W) x 261 (D) x 100 (H) mm          |
| Weight       | 6.82 kg                                 |
| Mounting     | Wall Mounting                           |

## EXTERNAL I/O MECHANICAL LAYOUT

### Front Panel

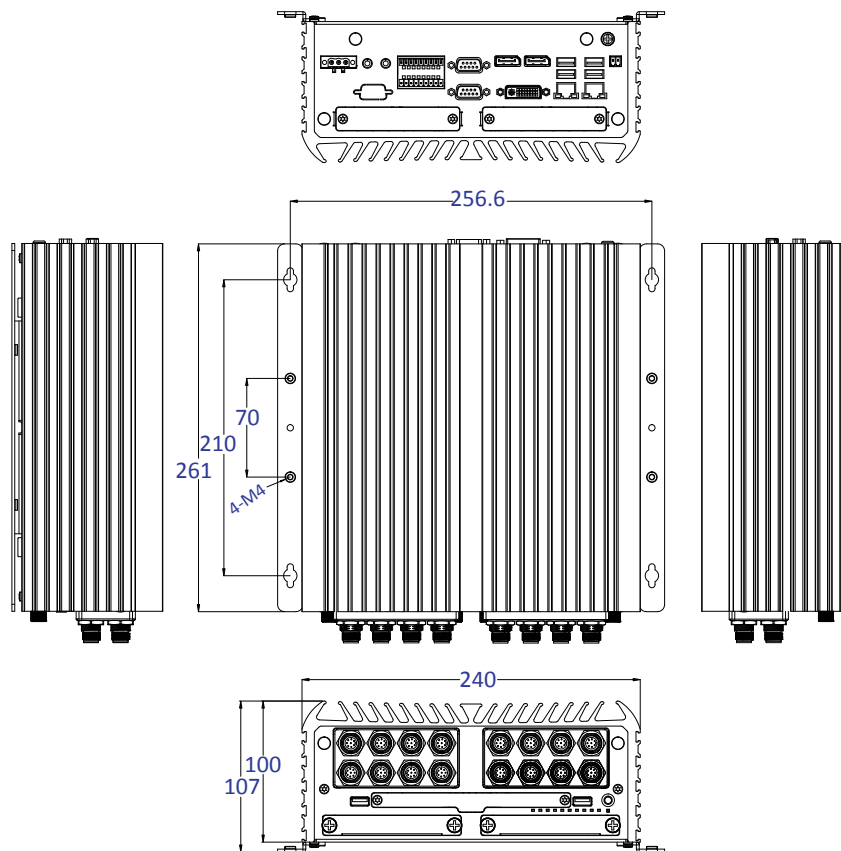


### Rear Panel



## DIMENSION

Unit: mm



## AVAILABLE MODELS

| MODEL NO.        | DESCRIPTION                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------------------|
| ACO-6010-16P-M12 | Surveillance Applied Fanless System with LGA 1151 for Intel® 6 <sup>th</sup> Gen Processor and Q170 PCH, 2x LAN, 16x M12 PoE |

## OPTIONAL ACCESSORIES

| MODEL NO.   | DESCRIPTION                                                           |
|-------------|-----------------------------------------------------------------------|
| 1-E09A22102 | Adapter AC/DC 24V 9.2A 220W with 3pin Terminal Block Plug 5.0mm Pitch |
| SFICBL022   | Power Cord, 3-pin US Type, 180cm                                      |
| 1-TPCD00002 | Power Cord, European Type, 180cm                                      |
| 1-TPCD00001 | Power Cord, 3-pin UK Type, 180cm                                      |

## PACKING LIST

- 1x ACO-6000 Series Embedded System
- 1x Utility DVD Driver
- 1x Wall Mount Kit
- 1x Accessory Kit
- 1x DVI to VGA Adapter