



# ARES-1230 Series

## Fanless Embedded Controller with Intel® Bay Trail SoC Processor



### Features

- Intel® Bay Trail SoC platform
- Fanless Design
- Ultra Low Profile Enclosure
- Expandable I/O Module
- 2 x Gbe Ethernet LANs Connectivity
- 1 x USB3.0 + 1 x USB2.0 Ports
- Expanded USB2.0 + COM + DIO (ARES-1230-E)
- 802.3AT Power over Ethernet PSE / PD Functionality (ARES-1230-PSE / ARES-1230-PD)

### System

CPU	Intel® Quad-Core Processor N2930
Memory	1 x SO-DIMM 204Pin modules supports up to 8GB DDR3L -1600MHz
Chipset	Intel® SoC
Graphics	Intel® HD Graphics
LAN Chipset	2 x Intel® i210AT PCIe controller (ARES-1230/ARES-1230-E) 3 x Intel® i210AT PCIe controller (ARES-1230-PD, 1 x 802.3AT Compliant PD) 4 x Intel® i210AT PCIe controller ARES(1230-PSE,2 x802.3AT Compliant PSE)
Watchdog Timer	1~255 levels reset

### I/O

Serial Port	2 x RS-232/422/485 (DB9, Selectable) (ARES-1230-E/PSE/PD)
USB Port	1 x USB3.0 + 1 x USB2.0 ports (ARES-1230) 2 x additional USB2.0 ports (ARES-1230-E/PSE/PD)
Video Port	1 x DVI-I connector 1 x HDMI connector
Digital I/O	4 x DI, 4 x DO (ARES-1230-E/PSE/PD)
Expansion Bus	1 x mSATA 1 x Full-Size mPCIe (PCIex1+USB2.0) 1 x Half-Size mPCIe (PCIex1 Lane only)

### Environmental

Operating Temp.	-20 ~ 70°C (-4 ~ 158°F), ambient with air flow
Storage Temp.	-40 ~ 85°C (-40 ~ 185°F)
Operating Humidity	10 ~ 95% @ 70°C (non-condensing)
Vibration	5~500Hz 3G rms X,Y,Z axis w/SSD, according to IEC 68-2-64 40G peak acceleration (11 m sec. duration), operation
Shock & Crash	60G peak acceleration (11 m sec. duration), non operation According to IEC 68-2-27

### Qualification

Certification	CE, FCC Class A
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### Power Requirement

Power Input	DC 12V Input w/ DC-Jack (ARES-1230) DC 9~36V Input w/ 3-PIN Terminal Block (ARES-1230-E/PSE)
Power Consumption	15W (ARES-1230) 20W (ARES-1230-E & ARES-1230-PD) 75W (ARES-1230-PSE)

### Storage

Type	1 x mSATA for SATA interface SSD Supports 600MB/s HDD transfer rate
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### Mechanical

Construction	Aluminum alloy
Mounting	Wall-Mount
Weight	770g (1.7lb) (ARES-1230) 900g (1.98lb) (ARES-1230-E/PD) 950g (2.09lb) (ARES-1230-PSE)
Dimensions (W x D x H)	180 (W) x 130 (D) x 25 (H) mm (ARES-1230) 180 (W) x 130 (D) x 40 (H) mm (ARES-1230-E) 180 (W) x 130 (D) x 50 (H) mm (ARES-1230-PSE/PD)

### OS Support

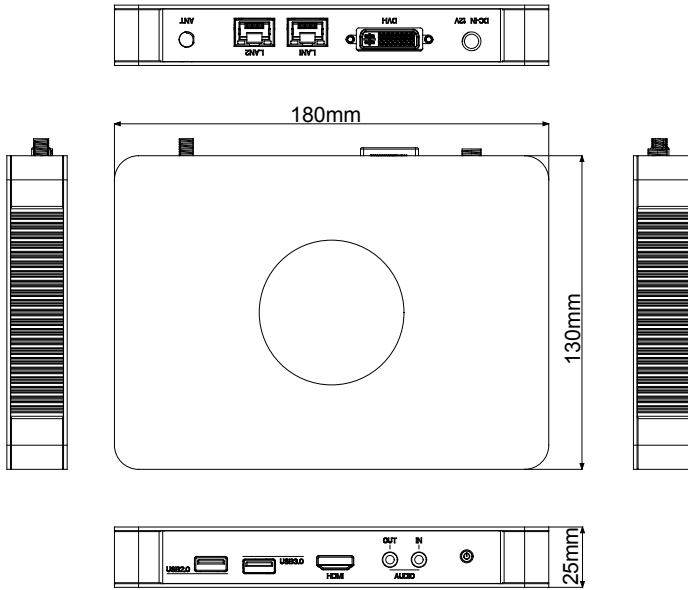
Windows 7 / Windows 8.1 / Windows 10

### Ordering Information

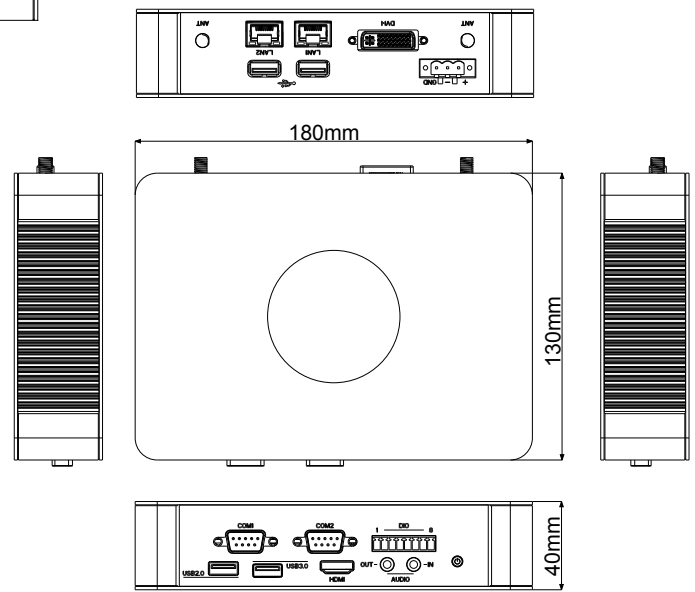
ARES-1230	ARES-1230 Intel® Quad-Core Processor N2930, barebone, 12V Input
ARES-1230-E(BTO)	ARES-1230 Intel® Quad-Core Processor N2930, barebone, with extended I/O, 9~36V Input
ARES-1230-PSE (BTO)	ARES-1230 Intel® Bay Trail Atom™ N2930 bare-bone, with extended I/O, PoE PSE, 9~36V Input
ARES-1230-PD (BTO)	ARES-1230 Intel® Bay Trail Atom™ N2930 bare-bone, with extended I/O, PoE PD

# Dimensions

## ARES-1230



## ARES-1230-E



### Optional Configuration (CTOS\* Kit)

PAC-P060W-04	60W AC/DC Adapter Kit (ARES-1230)	
PAC-P060W-02	12V/5A 60W AC/DC adapter kit (ARES-1230-E)	
WiFi-AT2130	Atheros AR9462 WiFi module w/ 10cm & 20cm internal wiring	
ANT-D11	1 x Wi-Fi Dual-band 2.4G/5G antenna	
MM-3IL-2G	Industrial DDR3L-1333/1600 2GB SO-DIMM SDRAM	
MM-3IL-4G	Industrial DDR3L-1333/1600 4GB SO-DIMM SDRAM	
32GB SSD	mSATA MLC 32GB	
64GB SSD	mSATA MLC 64GB	

\*CTOS means Configure-to-Order Service.