

AES-2230-C4

Intel Apollo Lake Celeron N3350 2.4GHz CPU
Fanless Industrial Computers, 4COM, 2LAN
VGA/HDMI, 2USB3/4USB2, wide DC-IN 9-36V



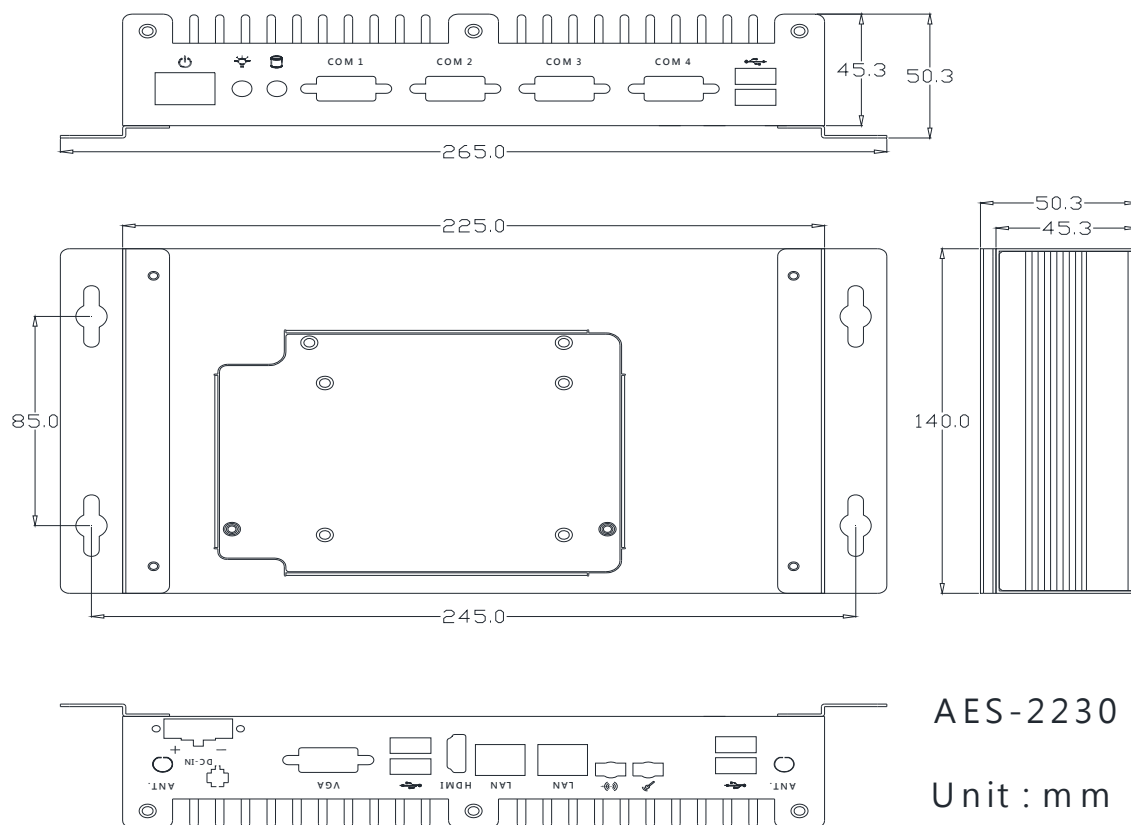
Features

- With Intel Apollo Lake Celeron Dual-Core N3350 2.4GHz CPU
- Pentium N4200 and Atom E3940 CPU are optional with MOQ
- Triple display VGA/HDMI/LVDS, 2xUSB 3.0, 4xUSB 2.0
- Dual Gigabit LAN Intel I210
- COM1 by RS-485/422/232, COM2/3/4 by RS-232
- Option 2-pole connector for reset control
- Wide DC 9-36V Input by 2-Pin phoenix connector
- Supports Microsoft Win 10 IoT 64bit (Ent LTSB)
- ATM, Kiosk, self-service, machine automation, IoT gateway platform

Specifications

	CPU	AES-2230L-C4	*AES-2230D-C4	*AES-2230M-C4
Processor System	CPU Speed & L2 Cache	1.1GHz / 2MB	1.1GHz / 2MB	1.6GHz / 2MB
	CPU Max. Speed/Core	2.4GHz / Dual Cores	2.5GHz / Quad Cores	1.8GHz / Quad Cores
	CPU/ TDP	Celeron N3350 / 6W	Pentium N4200 / 6W	Atom x5-E3940 / 9.5W
	BIOS	AMI 16Mb AMI UEFI with GUI support		
	Graphics Processor	Intel HD Graphics		
Expansion Slot	Mini-PCIe / mSATA	1 x full-size (shared with mSATA)		
	Mini-PCIe	1 x full-size		
Memory	Specification (SO-DIMM)	2 x DDR3L-1867		
	System Max. Capacity	16GB		
Graphics	VGA	1 x VGA(1920x1200)		
	HDMI	1 x HDMI, max resolution up to 4096x2160@24Hz		
	LVDS(Internal connector)	1 x Dual channel 24-bit LVDS up to 1920 x 1200, (customized LVDS solution for LCD)		
Ethernet	LAN Gigabit Controller	2 x Intel I210		
Storage	SATA3	1 x SATA3 for one 2.5" SATA drive		
	mSATA	1 x full-size Mini-PCIe shared with mSATA		
	2.5" Driver	1 x 2.5" SATA HDD/SSD space		
System Rear I/O	VGA	1 x DB-15		
	HDMI	1 x HDMI		
	Ethernet	2 x RJ45		
	USB Type A	2 x USB 3.0, 2 x USB 2.0		
	Line-out	1 x Audio jack (Line-out)		
	Mic-in	1 x Audio jack (Mic-in)		
	System Power Input	1 x 2-pin phoenix connector 9-36Vdc Input		
	Antenna / Reset	2 x Antenna holes, 1 x 2-pole (options)		
System Front Bezel	Power Switch	1x Moment button switch to turn-on or turn-off system		
	System Power LED	1x LED for system power status		
	HDD LED	1x LED for SATA HDD data access status		
	COM1 Port	1 x DB-9 (1 x RS-485/422/232, Pin9 +5/+12V selectable,)		
	COM2-4 Ports	3 x DB-9 (3 x RS-232)		
	USB Type A	2 x USB 2.0		
Operation System	Win 10	Win 10 IoT Ent LTSB , 64bit		
Watchdog Timer	Output and Interval	System reset, programmable 1 ~ 255 sec/min; 1 sec. or 1min. /step		
Power Requirement	DC Input	9-36Vdc input (option DC12V 60W adapter)		
Environment	Operating Temperature	-10°C ~60°C(32~140°F)		
	Air Flow Condition			50 ~ 60°C with 0.7m/s flow
	Storage Temperature	-40 ~ 85°C (-40 ~ 185°F)		
Physical Size	Dimensions	225mm(W) x 140mm(D) x 45mm(H)		
Packing Size	Dimensions	300mm(W) x 260mm(D) x 130mm(H)		
Weight	N.W / G.W.	Single packed: 3Kg / 4Kg		
Certifications	EMC	N/A		

Dimensions Outlook



Ordering Information

Part Number	CPU	VGA/HDMI	GbE	USB 3.0 / 2.0		COM	RAM	mSATA	2.5" SSD/HDD	DC Input
AES-2230L-C4-M0-m00P0	N3350	1/1	2	2	4	4	Option	Disabled	Option	9-36Vdc
*AES-2230D-C4-M0-m00P0	N4200	1/1	2	2	4	4	Option	Disabled	Option	9-36Vdc
*AES-2230M-C4-M0-m00P0	E3940	1/1	2	2	4	4	Option	Disabled	Option	9-36Vdc
AES-2230L-C4-M4-SD64P0	N3350	1/1	2	2	4	4	4GB	Enabled	2.5" SSD 64GB	9-36Vdc
AES-2230L-C4-M4-HD5P0	N3350	1/1	2	2	4	4	4GB	Enabled	2.5" HDD 500GB	9-36Vdc
AES-2230L-C4-M4-HG5P0	N3350	1/1	2	2	4	4	4GB	Enabled	2.5" HG 500GB	9-36Vdc

*AES-2230D and AES-2230M are for projects with MOQ.

Optional Items

Part Number	Description
AES-WM-BK	AES-1210 Wall Mount Bracket Kits, Black, with Screws
SODIMM-DDR3L-2GB / 4GB / 8GB	204-Pin SODIMM DDR3L 1867MHz, 2GB / 4GB / 8GB
MSD-M032 / MSD-M064	mSATA SSD Module MLC, Toshiba TSOP 19mn, 32GB / 64GB
SA-HD500	2.5" SATA HDD 7mm height, 500GB
SA-HG500	2.5" SATA HDD 7mm height, 500GB 7200RPM, for 7x24
SA-SD064 / SD128	2.5" SATA SSD 7mm height, 64GB / 128GB
WPEA-121N	Wi-Fi Module Atheros AR9382, Mini-PCle Half-size, 2T2R up to 300Mbps, with wire and antenna, LAN 802.11a/b/g/n
WPEA-152GN(BT)	Wi-Fi / BT, Mini-PCle Half-size Atheros AR9495 + AR3012, wire and antenna, LAN 802.11b/g/n, BT 4.0LE/3.0HS/2.1EDR
DBAE1-60W-2P	AC-DC 60W Adapter, 90V-264Vac input by C14 socket, DC 12V@5A output with 2-pin phoneix connector