ARES-5311

Fanless DIN-Rail Embedded System with Intel® Atom™ x7 / Celeron® Processor

Features

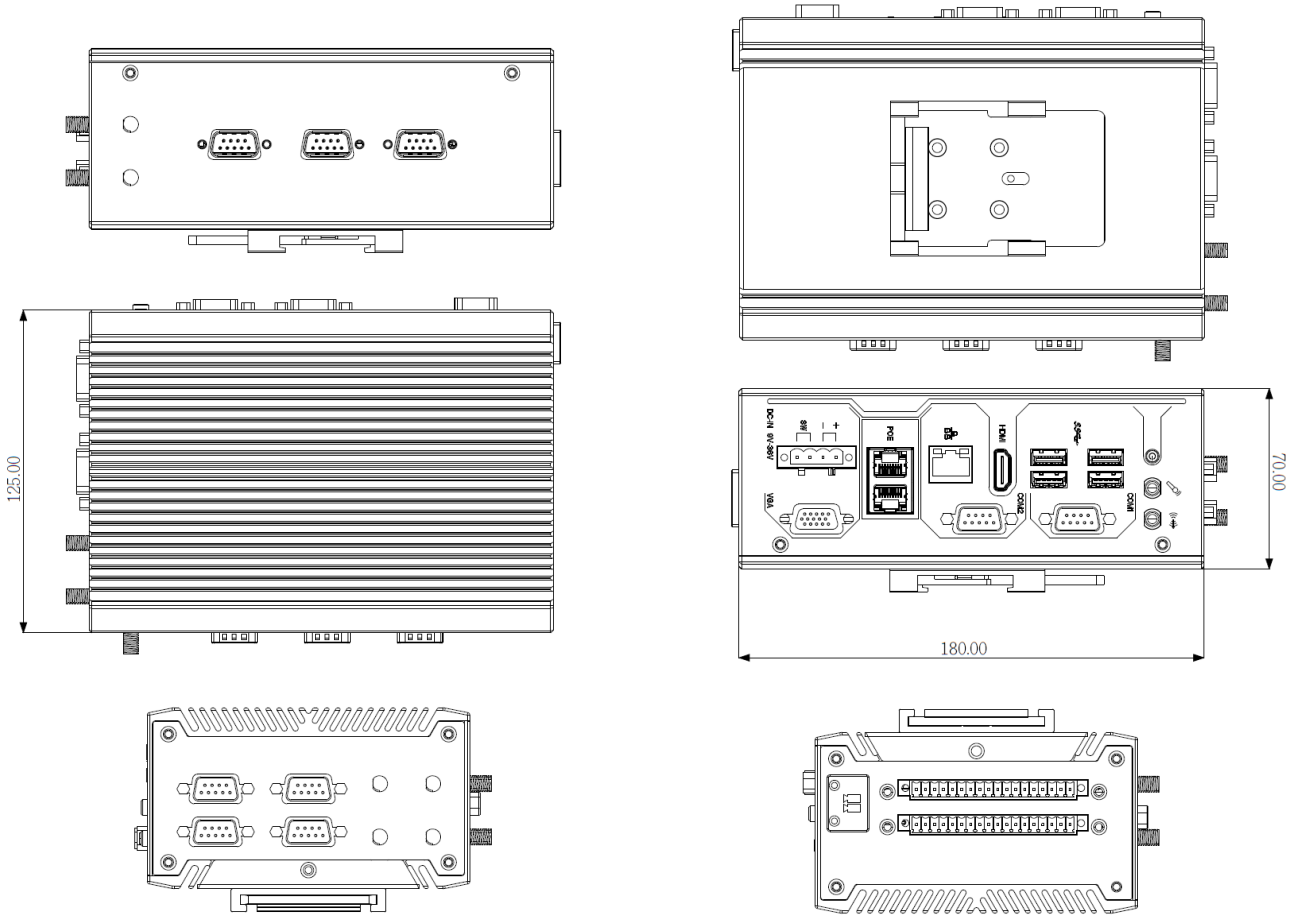
- Intel® Atom™ x7-E3950 / Celeron® N3350 Processor
- 2CH GbE PoE (Power over Ethernet), IEEE 802.3af Connectivity
- 9 x COM ports (2 x RS232/422/485 with RI/5V/12V + 4 x RS232/422/485 + 3 x RS232/485)
- 32 bit Digital I/Os with 2kV Isolation
- Wide-range Operating Temperature from -20 °C to 70 °C
- Power on/off Delay Control / Configurable Ignition Power Control for In-vehicle Application
- Dual SIM Slot (1 x Nano + 1 x Micro SIM)

System	
CPU	Soldered onboard Intel® Atom™ x7-E3950 / Celeron® N3350 Processor, Max.12W TDP
Memory	1 x 204-pin DDR3L SO-DIMM sockets, supporting 1866MHz SDRAM up to 8GB
Chipset	SoC
Graphics	Intel® HD Graphic 505
LAN Chipset	3 x Intel® i211AT PCIe controller (Co-Layout i210-IT)
Watchdog Timer	1~255 levels reset
I/O	
Serial Port	4 x RS232(Default)/422/485 2 x RS232(Default)/422/485 w/ RI/5V/12V 3 x RS232(Default)/485 (DB-9 connector) (Switch via BIOS)
USB Port	4 x USB 3.0/2.0 (Type A connector)
LAN	2 x RJ-45 ports for PoE, IEEE802.3af
	1 x RJ-45 ports for Giga LAN
Video Port	1 x HDMI connector (Up to 3840 x 2160@30Hz)
	1 x VGA connector (Up to 1920 x 1080@60Hz)
Digital I/O	16 x DI, 16 x DO with 2kV isolation protection
SIM	1 x internal on-board nano SIM slot 1 x internal on-board micro SIM slot
Expansion Bus	1 x Mini PCIe slot (PCIe x1+ USB2.0, Full size) 1 x Mini PCIe slot (USB2.0, Full size)
Storage	
Type	64GB eMMC on-board
	1 x M.2 M-Key, 2242, SATA3.0
Environmental	
Operating Temp.	-20 ~ 70 °C (-4 ~ 158°F), ambient w/ air flow
Storage Temp.	-40 ~ 80°C (-40 ~ 176°F)
Operating Humidity	10-95% @ 70°C (non-condensing)
Vibration	5~500Hz 3 Grms X,Y,Z axis w/ eMMC, according to IEC 68-2-64
Shock & Crash	10G peak acceleration (11 m sec. duration), operation
	30G peak acceleration (11 m sec. duration), nonoperation
	According to IEC 68-2-27
Qualification	
Certification	CE, FCC Class A
Power Requirement	
Power Input	DC 9~36V (4 pin DCin terminal block: V+, V-, SW-, SW+)
Ignition Switch	2-pin terminal block: IGN & GND
Power Consumption	Max. 65W
Mechanical	
Construction	Metal + Aluminum Alloy
Mounting	DIN-rail / Wall Mount
Weight	1.7Kg
Dimensions (W x D x H)	180 x 125 x 70 mm (7.09” x 4.9” x 2.75”)
OS Support	
Windows 10 IoT Linux: Ubuntu (Kernel: 3.1X)	

Ordering Information	
ARES-5311-E3950P	ARES-5311 w/ E3950, 1 x HDMI, 1 x VGA, 9 x COM, 16 x DI/DO, 2 x PoE, 1 x GbE LAN, 4 x USB3.0, 1 x 64GB eMMC, and 1 x M.2 M Key storage
ARES-5311-N3350P	ARES-5311 w/ N3350, 1 x HDMI, 1 x VGA, 9 x COM, 16 x DI/DO, 2 x PoE, 1 x GbE LAN, 4 x USB3.0, 1 x 64GB eMMC, and 1 x M.2 M Key storage

All specifications are subject to change without notice.

Dimensions



Standard Accessories

DRK-002 DIN Rail mounting kit for ARES-5300	AI6063 DIN Rail 84 x 60 x 9mm	

Optional Configuration (*CTOS Kit)

PAC-120W6B-FSP	19V/6.3A, 120W AC/DC adapter kit	
WIFI-AT4550	Atheros QCNFA324 Wi-Fi module w/ 2*30cm internal wiring	
ANT-D11	1 x Wi-Fi Dual-band 2.4G/5G antenna	
ANT-H11	2dBi HSUPA ANTENNA KIT	
LTE-1450	LTE Quectel EC25-E Cat 4 Mini-PCIe Wireless Kit(excluded North of America/Euro)	
MK-3C-2G/4G/8G DIMM Memory	2G/4G/8G DDR3L Memory with heat sink kit	
64GB SSD	M.2 M Key, 2242, 64GB, SATA3.0	
WMK-1973	Wall-mount kit for ARES-1973	

**CTOS means Configure-to-Order Service.*