

# ARK-1120F

## Intel® Atom™ N455 with 4 COM Port Extendibility Fanless Box PC



### Features

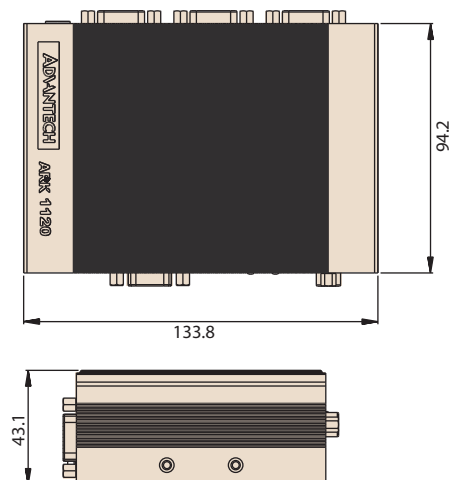
- Intel® Atom™ processor N455 1.66 GHz + ICH8M
- Low-power-consumption, <10W
- Palm-size design: 133.8(W) x 43.1(H) x 94.2(D) mm
- DDR3 memory support , up to 2GB
- Supports 2.5" SATA HDD Bay
- One half-size mini-PCIe slot. Ex: Wi-Fi add-on card
- 4COM ports (2 x RS-232, 2 x RS-232/422/485 select by BIOS)
- Optional VESA / DIN rail / Wall mounts
- Lockable DC jack design
- Supports SUSIAccess and Embedded Software APIs



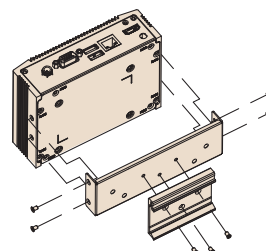
### Specifications

ARK-1120F-N5A1E		
Processor System	CPU	Intel Atom processor N455
	Frequency	1.66 GHz
	L2 Cache	512KB
	System Chipset	Intel ICH8-M
	BIOS	AMI 16 Mbit Flash BIOS
Memory	Technology	DDR3 up to 667 MHz
	Max. Capacity	2 GB
	Socket	1 x 204 pin SO-DIMM
Graphics	Chipset	Intel ICH8-M
	Interface	CRT interface, up to 1600 x 1200 (SXGA)
Ethernet	LAN	1 x 10/100/1000 Mbps Intel 82567V GbE, Support Wake on LAN
Audio	Interface	N/A
I/O Interface	Serial Ports	2 x RS-232, 2 x RS-232/422/485 (by BIOS setting)
	USB Interface	2 x USB ports, USB 2.0 Compliant
Other	Watchdog timer	255-level timer interval, setup by software
Expansion	Mini PCIe	1 x half-size Mini PCIe
Storage	HDD	Support one SATA 2.5" HDD Bay (support 9.5mm height only)
	SSD	Supports CompactFlash socket for type I/II CompactFlash disk (only available for T-Parts and CTOS service)
Software Support	Microsoft Windows	Windows 7, XP Professional, XP Embedded, WinCE 6.0
	Linux	Ubuntu v10.04.1
Power Requirement	Power Type	ATX
	Power Input Voltage	12 V <sub>DC</sub>
	Minimum Power Input	12 V, 1.5 A
	Power Adaptor	AC to DC, DC12 V/3 A, 36 W (Support DC Locker Design)
Power Consumption	Typical	9.12 W
	Max	10.80 W
Mechanical	Construction	Aluminum housing
	Mounting	Support DIN Rail / VESA / Wall mounts (Optional)
	Dimensions (W x H x D)	133.8 x 43.1 x 94.2 mm (5.27" x 1.70" x 3.71")
	Weight	0.7 kg (1.55 lb)
Environmental and Certifications	Operating Temperature	0 ~ 40° C (32 ~ 104° F) with 0.7m/s air flow and standard temperature HDD
	Storage Temperature	-40 ~ 85° C (-40 ~ 185° F)
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration During Operation	With CompactFlash disk: 3Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1hr/axis.
	Shock During Operation	With CompactFlash disk: 30Grms, IEC 60068-2-27, half sine, 11 ms duration
	EMC	CE/FCC Class A, CCC, BSMI
	Safety Certifications	UL, CCC, BSMI, CB

## Dimensions

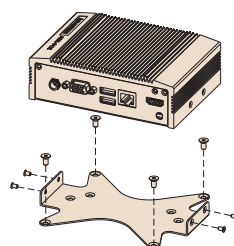


### DIN Rail

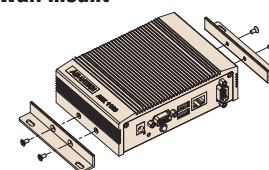


Unit: mm

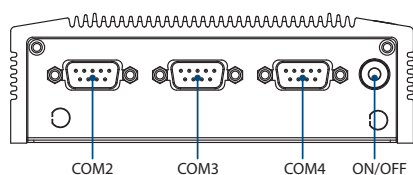
### VESA mount



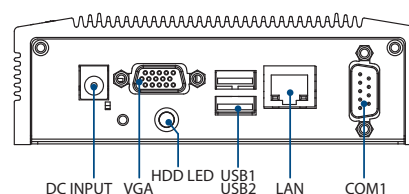
### Wall mount



## Front Panel External I/O Mechanical Layout/Drawing



## Rear Panel External I/O Mechanical Layout/Drawing



## Ordering Information

Part Number	Intel CPU	RAM	VGA	GbE	Audio	2.5" HDD bay	CF	USB 2.0	RS-232	RS-232/422/485	MiniPCIe	Operating Temp.
ARK-1120F-N5A1E	Atom N455 1.66GHz	Up to 2GB	1	1	N/A	1	1	2	2	2	1 Half size	0 ~ 40° C

Note: Memory, storage and operating system bundled by request.

## Packing List

Part Number	Description
-	1 x ARK-1120 unit
-	1 x Driver/Utility CD/manual
-	1 x Traditional chinese user manual for CCC
-	1 x China RoHS
1960047289T001	DC power adapter locker
1757003553	AC-to-DC Adapter DC12 V/3 A 36 W, with DC-Jack, 0 ~ 40° C for Home and Office Use

## Optional Items

Part Number	Description
1700001524	Power Cable 3-pin 180 cm, USA type
170203183C	Power Cable 3-pin 180 cm, Europe Type
170203180A	Power Cable 3-pin 180 cm, UK Type
1700008921	Power Cable 3-pin PSE Mark 183cm
AMK-V003E	ARK-112X series VESA mount kits
AMK-R001E	ARK-112X series DIN Rail mount kits
AMK-W001E	ARK-112X series wall mount kits

## Embedded OS

Part Number	Description
2070012123	XPE WES2009 V4.4 24MUJ
2070012267	WES7E 32bit w/ EN/JP/TC/SC