

ARK-11

Intel Celeron N3350 DC SoC with 4K Dual HDMI/Dual LAN/M.2 DIN-Rail Fanless Box PC



Features

- Intel Celeron N3350 Dual Core 1.1 GHz
- DIN-Rail system with essential I/O ports on front-side bezel
- I-Grade 8GB DDR3L memory and 128GB SSD built-in
- Windows 10 IoT Enterprise built-in
- 60W adaptor bundled in the accessory box
- Dual HDMI display up to 4K resolution
- 1 x full-size mPCIe with SIM holder and 1 x M.2 2230 for WIFI #1
- 12V ~ 28V wide range power input
- -30 ~ 70 °C extended operating temperature
- Advantech WISE-DeviceOn support



WISE-DeviceOn SUSI API



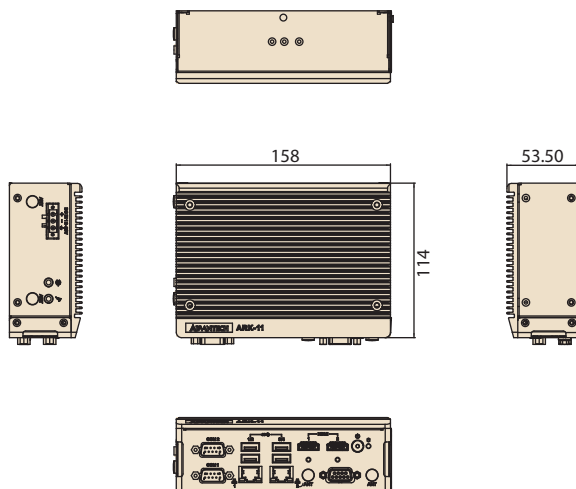
Specifications

Model Name	ARK-11-S1A5	
Processor System	CPU	Intel Celeron N3350 Dual Core SoC
	Frequency	1.1 GHz, turbo burst up to 2.4 GHz
	Core Number	2
	BIOS	AMI EFI 64 Mbit
Memory	Technology	DDR3L 1600 Mhz
	Max capacity	8GB, 1 x 8GB memory (-40 ~ 85 °C) built-in
	Socket	2 x 204-pin SO-DIMM
Graphics	Chipset	Intel HD Graphics 500, CPU integrated
	Graphic Engine	Gen9 Low Power: 18 Execution Units Media Codec Supported: H.264, MPEG2, MVC, VC-1, WMV9, H.265 / HEVC, VP8, JPEG / MJPEG 3D HW Acceleration: OpenGL 4.4, DirectX* 12, OpenCL* 2.0
	HDMI	HDMI1 : 3840 x 2160 @ 30Hz HDMI2 : 3840 x 2160 @ 30Hz
	Dual Display	HDMI1 + HDMI2
Ethernet	LAN1	10/100/1000 Mbps Intel i210GbE, support Wake On LAN
	LAN2	10/100/1000 Mbps Intel i210GbE, support Wake On LAN
Audio	Interface	Realtek ALC888S, High Definition Audio, Mic-in, Line-out
I/O Interface	Serial Ports	2 x RS-232/422/485 with auto flow control, COM2 with 5V/12V power supply
	USB Ports	4 x USB 3.0
	GPIO	8-bit Programmable DIO (Optional)
Expansion	Mini PCIe	1 x Full-size mPCIe with SIM holder #1
	M.2	1 x M.2 2230 E key for WIFI module #1
Storage	SSD/HDD	1 x 2.5" 128G TLC SSD (-40~85°C) built-in
	mSATA	1 x Full-size mSATA (*share with mPCIe slot)
Other	WatchDog Timer	255 levels timer interval, setup by software
Software Support	Microsoft Windows	Windows 10 IoT Enterprise built-in
	Linux	Support by project
Power Requirement	Power Type	ATX/AT
	Power Input Voltage	12 ~ 28 V _{DC}
	Power Adaptor	AC to DC, 24V/2.5A 60W adaptor built-in
Power Consumption	Typical	6.4W
	Max.	18.1W
Mechanical	Construction	Aluminum housing
	Mounting	DIN-rail/Wall Mount
	Dimensions (W x H x D)	53.5 x 158 x 114 mm (2.11" x 6.22" x 4.49")
	Weight	1.2 kg (2.65lb)
Environment	Operating Temperature	With extended temp. peripherals: -30 ~ 70 °C (-22 ~ 158 °F) with 0.7 m/s air flow With 2.5 inch hard disk: 0 ~ 40 °C (32 ~ 104 °F) with 0.7 m/s air flow
	Storage Temperature	-40 ~ 85 °C (-40 ~ 185°F)
	Relative Humidity	95% @ 40 °C (non-condensing)
	Vibration during Operation	With SSD: 3 Grms, IEC60068-2-64, random, 5~500 Hz, 1hr/axis
	Shock during Operation	With SSD: 30 G, IEC-60068-2-27, half sine, 11 ms duration
	EMC	CE/FCC Class B, CCC, BSMI
	Safety	UL, CB, CCC and BSMI

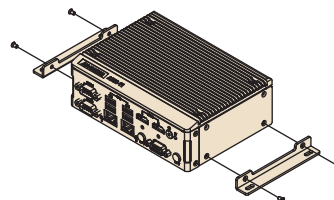
#1 SIM holder and M.2 slot are hardware interfaces for wireless communication integration only. System level RF certification is not available.

Dimensions

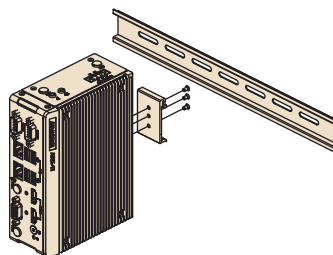
Unit: mm



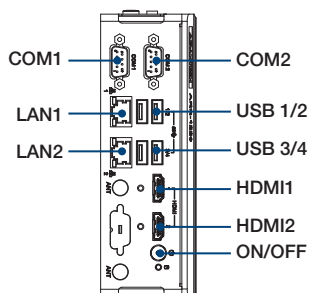
Wall Mount



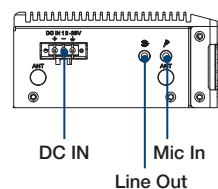
DIN Rail



Front Panel External I/O Mechanical Layout/Drawing



Top Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part No.	CPU	RAM	HDMI	GbE	USB 3.0	RS-232/422/485	Audio	Full-size MiniPCle	SIM	M.2	2.5" SATA III HDD Bay	mSATA	Power Input	Operating Temp.
ARK-11-S1A5	Intel Celeron N3350 1.1 GHz SoC	8GB built-in	2	2	4	2	Mic-in, Line-out	1	1	1	128G SSD built-in	1 (shared w/ mPCle)	12-28 V _{DC}	-30 ~ 70 °C

Packing List

Part Number	Description
-	1 x ARK-1220L Unit
-	1 x User Manual (Simplified Chinese)
-	Wrench for top cover
1960015198T011	1 x DIN-rail bracket
1652004519	1 x 3-pin terminal block
96PSA-A60W24T2-3	24V/2.5A 60W adaptor

Embedded OS

Part Number	Description
20706WX9ES0108	Win10 IoT Ent 2019 LTSC 64bit, English (14.7GB)

Optional Items

Part Number	Description
1702002600	Power cable 3-pin 183cm, USA type
1702002605	Power cable 3-pin 183cm, EU type
1700032693-11	Power cable 3-pin 183cm, UK type
1700000237	Power cable 3-pin 183cm, PSE type
1700023855-01	1M lockable HDMI cable
1700023856-01	3M lockable HDMI cable
1700019967	GPIO cable, F Cable 2*5P-2.0/D-SUB 9P(F) 15CM
AMK-W003	ARK-1220L wall mount kit