ARK-2151S

Outdoor Full HD NVR w/4 PoE Ports 4th Gen. Intel Core i5 4300U SoC Fanless Box PC

Features

- Intel® Core i5-4300U Dual Core 1.9 GHz SoC
- 4 PoE Ports to Support Mainstream IP Cameras
- Diversity Communication Abilities, ex. WWAN, WLAN
- 3KV isolation for 6 x Di & 2 x Do
- 9 ~ 36 V_{DC}* Wide Power Input w/isolation
- 1 x Removable 2.5" drive bay
- Supports iManager, SUSIAccess and Embedded Software APIs

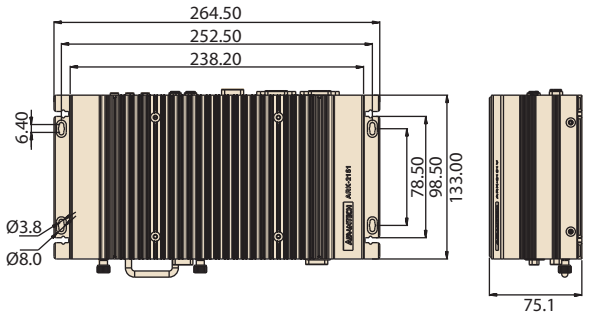
Specifications

		ARK-2151S-S9A1E
Processor System	CPU	Intel i5-4300U
	Frequency	1.9 GHz
	L3 Cache	3 MB
	BIOS	AMI EFI 128 Mbit
Memory	Technology	DDR3L 1600 MHz
	Max. Capacity	8 GB
	Socket	1 x 204-pin SO-DIMM
Graphics	Chipset	GT2-4400 Graphics
	Graphic Engine	DirectX11.1, OpenGL 4.0, and OpenCL 1.2 Full AVC/VC1/MPEG2 HW Decode
	VGA	Up to 1920 x 1200 with 60 Hz, 154 MHz pixel clock rate
	HDMI	Lockable HDMI connector, up to 4K at 24 Hz
Audio	Main System	Realtek ALC888S, High Definition Audio (HD), Line-in, Line out, Mic-in
Ethernet	LAN #1	10/100/1000 Mbps Intel I218 GbE, support Wake on LAN
	LAN #2	10/100/1000 Mbps Intel Intel I210-IT, support Wake on LAN
I/O Interface	Power over Ethernet, PoE	4 x 10/100 Mbps - 4ports full-load, IEEE802.3af Class 2 (7Watt) - 2ports full-load, IEEE802.3af Class 3 (15.4Watt)
	Serial Ports	2 x RS-232/422/485 ports (support auto flow control, BIOS selectable)
	USB Interface	2 x USB 2.0 & 2 x USB3.0
	GPIO	6 x DI & 2 x DO w/ 3KV isolation Input Voltage: 0 to 30 V_{DC}, Output Current: Max. 500 mA per channel On-state Voltage: 24 V_{DC} nominal, open collector to 30 V_{DC}
Other	Watchdog timer	255-level timer interval, setup by software
Expansion	Mini PCIe #1	Full-size Mini PCIe, support mSATA
	Mini PCIe #2	Half-size Mini PCIe, support WLAN module
	Mini PCIe #3/4	2 x Full-size Mini PCIe w/SIM holders, support WWAN module. (USB interface)
Storage	2.5" Drive Bay	1 x removable 2.5" drive bay (Max 9.5mm height)
	mSATA	Laverage MiniPCIe #1 slot
Software Support	Microsoft Windows	WES8, WES7, Windows 8, Windows 7
	Linux	Support by project
Power Requirement	Power Type	ATX/AT
	Power Input Voltage*	9 ~ 36 V_{DC} w/ isolation
	Isolation	1.5 KV Isolated
Mechanical	Construction	Aluminum housing, Silver
	Mounting	Din-Rail mounting, Desk/wall-mounting, VESA mounting
	Dimensions (W x H x D)	264.5 x 75.1 x 133.0 mm (10.41" x 2.96" x 5.24")
Environment	Operating Temperature	With extended temperature peripherals:-20 ~ 60° C with 0.7m/s air flow With standard temperature peripherals:0 ~ 45° C with 0.7m/s air flow
	Storage Temperature	-40 ~ 85° C (-40~185° F)
	Relative Humidity	95% @ 40° C (non-condensing)
	Vibration During Operation	With mSATA/SSD: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis
	Shock During Operation	With mSATA/SSD: 30 G, IEC 60068-2-27, half sine, 11 ms duration
Regulation	EMC	CE/FCC Class A, CCC, BSMI
	Safety	CB, UL, CCC, BSMI

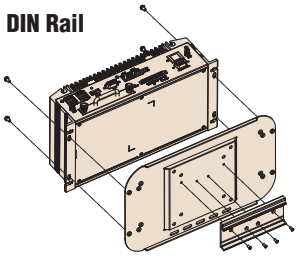
* Power Input Constraint at low voltage: 9~10.9V

Dimensions

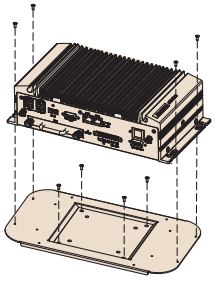
Unit: mm



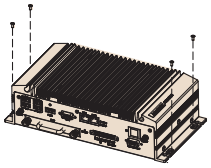
DIN Rail



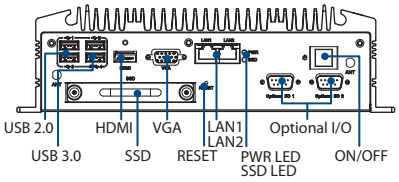
VESA mount



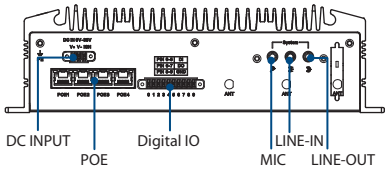
Wall mount



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part Number	Intel CPU	RAM	2.5" Drive	mSATA	Display	GbE	PoE	USB	DIO	RS-232/ 422/485	MiniPCIe	SIM Holder	Power Input	Operating Temperature
ARK-2151S-S9A1E	Intel i5-4300U DC 1.9 GHz	Up to 8GB	1	1	1 x HDMI 1 x VGA	2	4	2 x USB2.0 2 x USB3.0	6Di 2Do	2	3 x Full Size 1 x Half Size	2	9 ~ 36 V_{DC}	-20 ~ 60° C

Packing List

Part Number	Description
-	1 x ARK-2151 Unit
-	1 x Driver/Utility CD/Manual
-	1 x User Manual (Simplified Chinese)
1652000049	3-pole phoenix power block 3.81mm
1652003235	10-Pin DIO plug in block

Embedded OS

Part Number	Description
TBC	WES8 OS image
TBC	WES7 OS image

*Default BIOS is supported for 64-bit OS installation, BIOS 32-bit OS is supported by project

Optional Items

Part Number	Description
TBC	AC-to-DC Adapter with Phoenix Power Plug, 0 ~ 40° C for Home and Office Use
1700001524	Power Cable 3-pin 180cm, USA type
170203183C	Power Cable 3-pin 183cm, Europe type
170203180A	Power Cable 3-pin 183cm, UK type
AMK-V004E	VESA mounting kit
AMK-R004E	DIN-rail mounting kit