ARK-1250L

Intel® 11th gen Core™ i processor with Triple LAN/ Quadruple COM Din-Rail Fanless Box PC

Features

- Intel 11th gen. Core i5/i3
- DIN-Rail system with essential I/O ports on front-side bezel
- 3 x Intel GbE, 4x RS-232/422/485, 8-bit DIO, optional CANBus
- 3 Expansion: M.2 E-Key 2230, M.2 B-Key 2280, 1 x Full-size mSATA share with mPCIe slot
- Dual independent displays with one 4K HDMI and one VGA
- 3 x USB 3.2 and 3 x USB 2.0
- mSATA and 1 x 2.5" SATA storage device
- 12V ~ 24V wide range power input
- -30 ~ 60 °C extended operating temperature
- Advantech iEdge support

Windows Embedded **WISE-DeviceOn** **SUSI API**

Specifications

Model Name		ARK-1250L	
Processor System	CPU	Core i5-1145G7E	Core i3-1115G4E
	Frequency	1.5GHZ turbo boost up to 4.1 GHz	2.2 GHz turbo boost up to 3.9 GHz
	Core Number	4	2
	BIOS	AMI EFI 256 Mbit	
Memory	Technology	DDR4 3200 Mhz	
	Max capacity	Up to 64 GB with 2 x slots	
	Socket	2 x Dual Channel DDR4 3200 MHz 260 pin SO-DIMM (no support ECC)	
Graphics	Chipset	Intel® Iris® Xe graphics	
	HDMI 2.0b	Up to 4096 x 2160 @ 60Hz	
	VGA	Up to 1920 x 1080 @ 60Hz	
	Dual Display	HDMI + VGA	
Ethernet	LAN1	10/100/1000/2500 Mbps Intel i225 GbE, support Wake On LAN	
	LAN2	10/100/1000 Mbps Intel i219 GbE, support Wake On LAN	
	LAN3	10/100/1000/2500 Mbps Intel i225 GbE, support Wake On LAN	
Audio	Interface	Realtek ALC888S, High Defination Audio, Mic-in, Line-out	
I/O Interface	Seriel Ports	4 x RS-232/422/485 with auto flow control	
	USB Ports	3 x USB3.2, 3 x USB2.0	
	GPIO	8-bit Programmable DIO	
	CANBus	Optional (Support by project)	
Expansion	Mini PCIe	1 x Full-size mPCIe	
	M.2	1 x M2. 2230 E key and 1 x M.2 2280 B key with nano SIM holder #1	
Storage	SSD/HDD	1 x 2.5" SATAIII Drive bay (compatible with 15mm height)	
	mSATA	1 x Full-size mSATA (*share with mPCIe slot)	
Other	WatchDog Timer	255 levels timer interval, setup by software	
	TPM	TPM 2.0 (project support by AMO-I029)	
Software Support	Microsoft Windows	Windows 10 Enterprice	
	Linux	Project support	
Power Requirement	Power Type	ATX/AT	
	Power Input Voltage	12 ~ 24 V_{DC}	
	Power Adaptor	AC to DC, 90W adaptor built-in	
Power Consumption	Typical	TBD	
	Max.	TBD	
Mechanical	Construction	Aluminum housing	
	Mounting	DIN-rail/Wall Mount	
	Dimensions (W x H x D)	173 x 141 x 60 mm (6.73 x 5.55 x 2.36 in)	
	Weight	1.5KG	
Environment	Operating Temperature	With extended temp. peripherals: -30 ~ 60° 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 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	

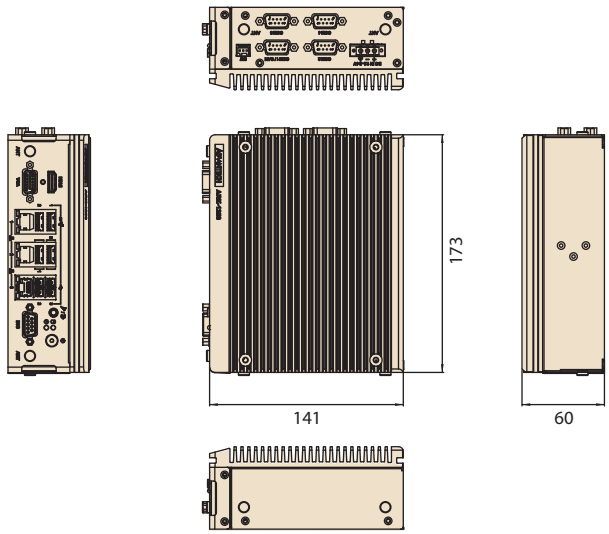
#1 SIM holder and M.2 slot are hardware interfaces for wireless communication integration only. System level RF certification is not available.

研伟科技 15323776600

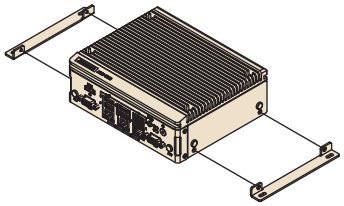
All product specifications are subject to change without notice.

Dimensions

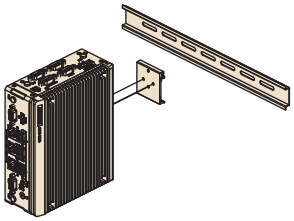
Unit: mm



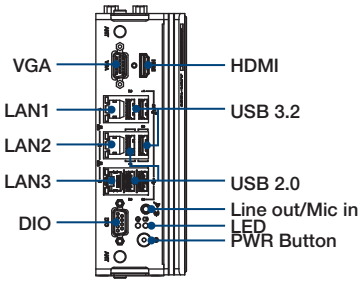
Wall Mount



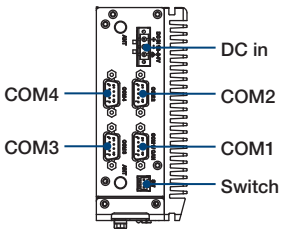
DIN Rail



Front Panel External I/O Mechanical Layout/Drawing



Top Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part No.	CPU	RAM	HDMI	VGA	GbE	USB 3.2	USB 2.0	RS-232/ 422/485	Audio	Full-size MiniPCIe	SIM	M.2	2.5" SATA III HDD Bay	mSATA	Power Input	Operating Temp.
ARK-1250L-U2A1	Intel Core i3-1115G4E	Up to 64 GB	1	1	3	3	3	4	Mic in or Line out	1	1	2	1	1 (shared w/ mPCIe)	12~24 V_{DC}	-20 ~ 60 °C
ARK-1250L-S5A1	Intel Core i5-1145G7E	Up to 64 GB	1	1	3	3	3	4	Mic in or Line out	1	1	2	1	1 (shared w/ mPCIe)	12~24 V_{DC}	-20 ~ 60 °C

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

Packing List

Part Number	Description
-	1 x ARK-1250L Unit
-	1 x User Manual (Simplified Chinese)
-	Wrench for top cover
XARK-ADP-90MDH	AC to DC adaptor , 19V/90W
1950016395T101	1 x DIN-rail bracket
1652004519	1 x 3-pin plug-in block for power in
1652007880-01	1 x 4-pin terminal block for switch

Embedded OS

Part Number	Description
TBD	Win10 IoT Ent 2019 LTSC 64bit, English

Optional Items

Part Number	Description
96PSA-A120W24T2-3	AC to DC adaptor, 24V/120W
1700001524	Power Cable 3-pin 180cm, USA type (for XARK-ADP-90MDH)
170203183C	Power Cable 3-pin 180cm, Europe type (forXARK-ADP-90MDH)
170203180A	Power Cable 3-pin 180cm, UK type (for XARK-ADP-90MDH)
1700008921	Power Cable 3-pin PSE Mark 183cm (for XARK-ADP-90MDH)
1702002600	Power cable 3-pin 183cm, USA type (for 96PSA-A120W24T2-3)
1702002605	Power cable 3-pin 183cm, EU type (for 96PSA-A120W24T2-3)
1702031801	Power cable 3-pin 183cm, UK type (for 96PSA-A120W24T2-3)
1700000237	Power cable 3-pin 183cm, PSE type (for 96PSA-A120W24T2-3)
1700024369-01	1M HDMI cable
1700031560-01	1.8M HDMI cable

Optional MOS modules for iDoor Expansion

Part Number	Description
TBD	