



ARES-1970

Fan-Less Embedded Controller with 6th Generation Intel® Core™ Processors



Features

- 6th generation Intel® SkyLake-U platform
- Compact & fan-less design
- 4 x USB3.0 combo ports
- Dual Gbe Ethernet LANs connectivity
- Multi COMs: support 4 x RS232/422/485, 4 x RS232/485
- Support dual-display for 1 x VGA and 1 x HDMI
- Support HDMI1.4 with max. resolution 4096x2304@24Hz

System

CPU	Soldered onboard Intel® Core™ i5-6300U , 2.4GHz 3M L2 Cache, 15W TDP Soldered onboard Intel® Core™ i7-6600U , 2.6GHz 4M L2 Cache, 15W TDP Soldered onboard Intel® Core™ i3-6100U , 2.3GHz 3M L2 Cache, 15W TDP
Memory	1 x 260-pin DDR4 SO-DIMM socket, supporting 2133MHz SDRAM up to 16GB, (4GB DDR4 SO-DIMM pre-installed)
Chipset	Intel® SoC
Graphics	Integrated Intel® HD Graphics 520
LAN Chipset	1 x Intel® i219LM PCIe controller w/ iAMT 11.0 (except i3-6100U) 1 x Intel® i210IT PCIe controller
Watchdog Timer	1~255 levels reset

I/O

Serial Port	4 x RS232/422/485 ports (2 ports with 5V/12VDC) (DB9, Jumper Switch Selectable) 4 x RS232/485 ports
USB Port	4 x USB3.0/2.0 ports 2 x USB2.0 Ports
Video Port	1 x HDMI, up to 4K (UHD) 1 x VGA
Audio	Mic-in / Line-out
Expansion Bus	1 x mSATA (SATA, Full Size) 1 x mPCIe (PCIex1+USB2.0, Half Size) 1 x mPCIe (PCIex1+USB2.0, Full Size) SIM card socket for optional Wi-Fi or HSUPA/LTE module

Environmental

Operating Temp.	-20 ~ 70°C (-4 ~ 158°F)
Storage Temp.	-40 ~ 85°C (-40 ~ 185°F)
Operating Humidity	10 ~ 95% @ 70°C (non-condensing)

Vibration	5~500Hz 3G rms X,Y,Z axis w/mSATA, according to IEC 68-2-64 10G peak acceleration (11 m sec. duration), operation
Shock & Crash	30G peak acceleration (11 m sec. duration), non operation According to IEC 68-2-27

Qualification

Certification	CE, FCC Class A
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Power Requirement

Power Input	DC 12~28 Input
Power Consumption	Max. 30W (w/o I/O card)

Storage

Type	1 x mSATA
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Mechanical

Construction	Aluminum alloy
Mounting	Wall-mount//DIN-rail
Weight	1.66kg (3.66lb)
Dimensions (W x D x H)	265 x 141 x 62 mm (10.43" x 5.55" x 2.44")

OS Support

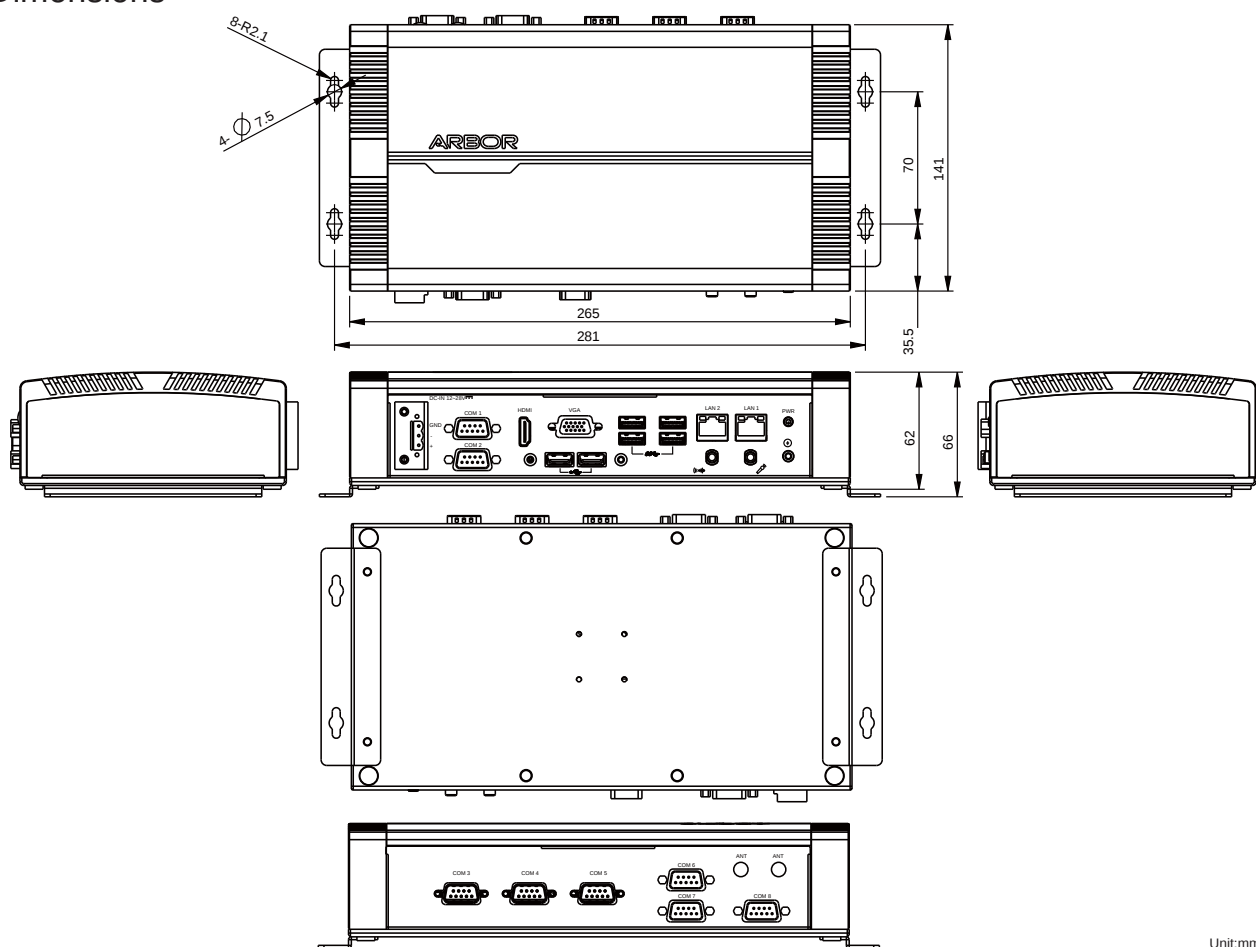
Windows 7 / Windows 8.1 / Windows 10 / Linux: Ubuntu (Kernel: 4.X)

Ordering Information

ARES-1970-6300U (STD)	ARES-1970 w/6th Intel® Core i5-6300U and 4GB memory, w/o storage
ARES-1970-6600U (BTO)	ARES-1970 w/6th Intel® Core i7-6600U and 4GB memory, w/o storage
ARES-1970-6100U (BTO)	ARES-1970 w/6th Intel® Core i3-6100U and 4GB memory, w/o storage



Dimensions



Unit:mm

Standard Accessories

WMK-1970 Wall-mount kit for ARES-1970



Optional Accessories

64/128/256GB mSATA MLC 64/128/256GB



MM-4I-8G Industrial-grade DDR4-2400 8GB SDRAM



PAC-P060W-02 12V/ 60W AC/DC adapter kit



WiFi-AT4550 Atheros QCNFA324 WiFi module w/ 2 x 30cm internal wiring (must be used with 2 x ANT-D11)



ANT-D11 1 x Wi-Fi Dual-band 2.4G/5G antenna



DRK-002 Din rail mounting kit for ARES-1970



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