



ARES-1965

Machine Vision Controller with 6th / 7th Generation Intel® Core™ / Celeron® Processors



Features

- 6th / 7th generation Intel® SkyLake-U / Kaby Lake-U platform
- 4CH GbE PoE (Power over Ethernet), IEEE 802.3af compliant designed for GigE camera
- 16 x DI/DO with 1.5kV isolation protection
- PoE Ports Comply with IEC61000-4-5 (±1kV Surge Protection)
- Support 4 x USB3.0, 2 x RS-232 and 1 x VGA
- Internal USB2.0 Type-A connector for internal dongle
- Fanless Design

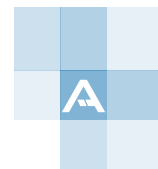
Industrial Automation System

System	
CPU	Soldered onboard Intel® Celeron® 3855U, 1.6GHz 2M L2 Cache, 15W TDP
	Soldered onboard Intel® Core™ i7-6500U, 2.5GHz 4M L2 Cache, 15W TDP
	Soldered onboard Intel® Celeron® 3965U, 2.2GHz 2M L2 Cache, 15W TDP
	Soldered onboard Intel® Core™ i3-7100U, 2.4GHz 3M L2 Cache, 15W TDP
	Soldered onboard Intel® Core™ i5-7300U, 2.6GHz 3M L2 Cache, 15W TDP
	Soldered onboard Intel® Core™ i7-7500U, 2.7GHz 4M L2 Cache, 15W TDP
Memory	1 x 260-pin DDR4 SO-DIMM socket, supporting 2133MHz SDRAM up to 16GB
Chipset	Intel® SoC Integrated
Graphics	Intel® HD Graphics
LAN Chipset	1x Intel® i219LM PCIe controller
	4x Intel® i211AT PCIe controller for PoE
Watchdog Timer	1~255 levels reset
I/O	
Serial Port	2 x RS232 DB-9 connectors
USB Port	4 x USB 3.0/2.0 Type A connectors
	1 x Vertical USB 2.0 (type A) internal
LAN	4 x RJ-45 ports for PoE, IEEE802.3af w/ ±1kV Surge Protection (Provide up to 30W power in total)
	1 x RJ-45 ports for PHY Giga
Video Port	1 x VGA
Storage	1 x SATA 3.0 Port and 1 x SATA Power connector
	1 x mSATA port
Digital I/O	16 x DI, 16 x DO (1.5KV isolation protection / DO support 24V 200mA)
Expansion Bus	1 x mSATA (SATA, Full size)
	1 x Mini PCIe slot (PCIe x 1 + USB2.0, Full size)

Environmental	
Operating Temp.	0 ~ 55 °C (32 ~ 131°F), ambient w/ air flow
Storage Temp.	-20 ~ 60°C (-4 ~ 140°F)
Operating Humidity	10-95% @ 55 °C (non-condensing)
Vibration	5~500Hz 3 Grms X,Y,Z axis w/mSATA, according to IEC 60068-2-64
Shock & Crash	10G peak acceleration (11 m sec. duration), operation
	30G peak acceleration (11 m sec. duration), nonoperation
	According to IEC 60068-2-27

Qualification	
Certification	CE, FCC Class A
Power Requirement	
Power Input	DC 9~36V
Power Consumption	Max. 60W (w/o I/O card)
Storage	
Type	1 x 2.5" internal drive bay for HDD/SSD
	1 x mSATA port

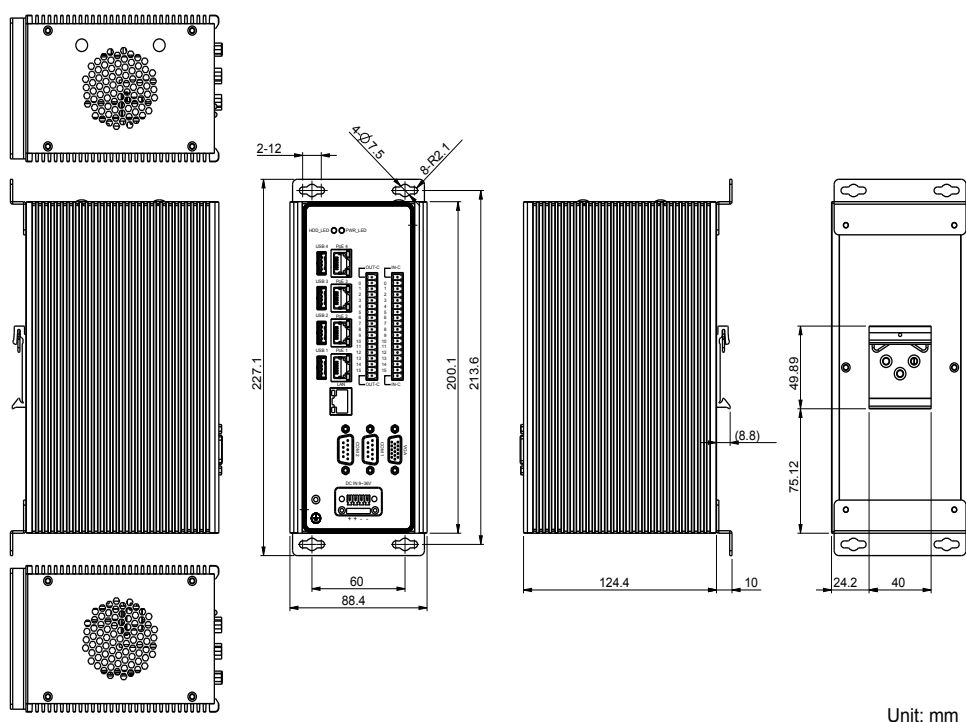
Mechanical	
Construction	Metal + Aluminum Alloy
Mounting	Wall-mount / DIN-rail
Weight	2.3KG
Dimensions (W x D x H)	90 x 140 x 195 mm (3.54" x 5.51" x 7.68")
OS Support	
Window 7/ Windows 10 IoT	
Linux: Ubuntu (Kernel: 3.1X)	



Ordering Information

ARES-1965-3855U-2WD4 (BTO)	ARES-1965 w/ Intel® Celeron 3855U, 2 x COM, 16 x DI/DO, 1 x GbE Lan, 4 x PoE, 5 x USB
ARES-1965-6500U-2WD4 (BTO)	ARES-1965 w/ Intel® Core™ i7-6500U, 2 x COM, 16 x DI/DO, 1 x GbE Lan, 4 x PoE, 5 x USB
ARES-1965-3965U-2WD4 (BTO)	ARES-1965 w/ Intel® Celeron 3965U, 2 x COM, 16 x DI/DO, 1 x GbE Lan, 4 x PoE, 5 x USB
ARES-1965-7100U-2WD4 (BTO)	ARES-1965 w/ Intel® Core™ i3-7100U, 2 x COM, 16 x DI/DO, 1 x GbE Lan, 4 x PoE, 5 x USB
ARES-1965-7300U-2WD4 (BTO)	ARES-1965 w/ Intel® Core™ i5-7300U, 2 x COM, 16 x DI/DO, 1 x GbE Lan, 4 x PoE, 5 x USB
ARES-1965-7500U-2WD4 (BTO)	ARES-1965 w/ Intel® Core™ i7-7500U, 2 x COM, 16 x DI/DO, 1 x GbE Lan, 4 x PoE, 5 x USB

Dimensions



Unit: mm

Standard Accessories

WMK-1965 Wall-mount kit for ARES-1965



DRK-1965 DIN-Rail kit for ARES-1965



Optional Accessories

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



64/128/256GB SSD 2.5" SSD MLC 64/128/256GB Kit



MM-4C-4G/8G/16G DDR4-2133 4GB/8GB/16GB SDRAM



PAC-120W6B-FSP 19V/6.3A 120W 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



Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

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