ESRP-RMM-UNO247

IoT Edge Computer with Intel® Celeron® J3455 Processor, 2 x LAN, 6 x COM, 4 x USB, 1 x HDMI, and 1 x VGA

Features

- Intel® Celeron® J3455 processor
- Robust yet compact fanless design with high stability
- 2 x GbE, 2 x USB 3.0, 2 x USB2.0, 4 x RS232, 2 x RS485, 1 x HDMI, 1 x VGA
- Rubber stopper for stand mount and optional DIN-rail mount kit
- Optimized mechanical design for easy RAM swapping
- Threaded DC power jack ensures a secure and stable connection
- Optimized mechanical design for easy RAM swapping
- Supports WISE-PaaS/DeviceOn and WISE-Marketplace

Introduction

Cloud-to-Edge system intergation is inevitably set to play an increasingly important role in IoT world. ESRP-RMM-UNO247, powered by DeviceOn, simplifies the remote monitoring and management and offers Plug-and-Play with zero-touch type provisioning with the variety of Advantech industrial Apps.

WISE-DeviceOn Function Highlights

Device Management
- Remote Monitoring & Control
- Device Onboarding & Registration

Connectivity Service
- Industrial Protocol Connectivity
- Plug-n-Play Peripherals

System Security
- McAfee Application Control
- Acronis Backup Recovery

Edge Intelligence
- Real-Time Data Processing
- Data Analysis & Filtering

Cloud Integration
- Pre-Configured with Azure, Ali, AWS
- Data Intelligence & AI Enabling

WISE-Marketplace Integration
- Over 200+ I.App Offerings
- Easy to Purchase and Deploy

Specifications

General

Certification	CE, FCC, UL, CCC, BSMI
Dimensions (W x D x H)	200 x 140 x 50 mm (7.8 x 5.5 x 1.9 in)
Form Factor	Regular size
Enclosure	Aluminum housing
Mount Options	Stand, DIN rail (optional)
Weight (Net)	1.0 kg (2.2 lb)
Power Requirement	$12V_{DC}$
Power Consumption	17W (typical), 31W max.
OS Support	Windows 10 IoT Enterprise LTSC

System Hardware

BIOS	AMI UEFI 64 Mbit
Watchdog Timer	Programmable timer with 255 interval levels, from 1 to 255 seconds
TPM	Available upon request
Processor	Intel® Celeron® J3455, 1.5 GHz
Memory	1 x DDR3L SODIMM slot (up to 8 GB)
Graphics Engine	Intel HD Graphics
Ethernet	10/100/1000 Mbps Realtek RTL8111G-CG
LED Indicators	LEDs for Power and HDD
Storage	1 x Full-size mSATA with built-in 120G SSD 1 x 2.5" SATA HDD drive bay (compatible with 9.5 mm HDD height)
Expansion	1 x Full size mPCIe slot (PCIe/ USB Signal) 1 x M.2 (2230, E Key) 1 x Micro SIM card slot

I/O Interfaces

Serial Ports	4 x RS232 2 x RS485 DB9, 50bps ~ 115.2kbps
LAN Ports	2 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T fast Ethernet
USB Ports	2 x USB 3.0, 2 x USB 2.0
Displays	1 x HDMI 1.4b (3840 x 2160 @30 Hz) 1 x VGA (1920 x 1080 @60 Hz)
Power Connector	1 x Lockable DC jack

Environment

Operating Temperature	0 ~ 50 °C/30 ~ 122 °F with 0.7m/s airflow -20 ~ 60 °C/-4 ~ 140 °F with 0.7m/s airflow (with extended temperature peripherals, refer to the optional memory list on page 2)
Storage Temperature	-40 ~ 85 °C (-40 ~ 185 °F)
Relative Humidity	10 ~ 95% RH @ 40 °C/104 °F, non-condensing
Shock Protection	Operating, IEC 60068-2-27, 50G, half sine, 11ms
Vibration Protection	Operating, IEC 60068-2-64, 3Grms, random, 5 ~ 500Hz, 1hr/axis (mSATA) Operating, IEC 60068-2-64, 0.5Grms, random, 5 ~ 500Hz, 1hr/axis (HDD)

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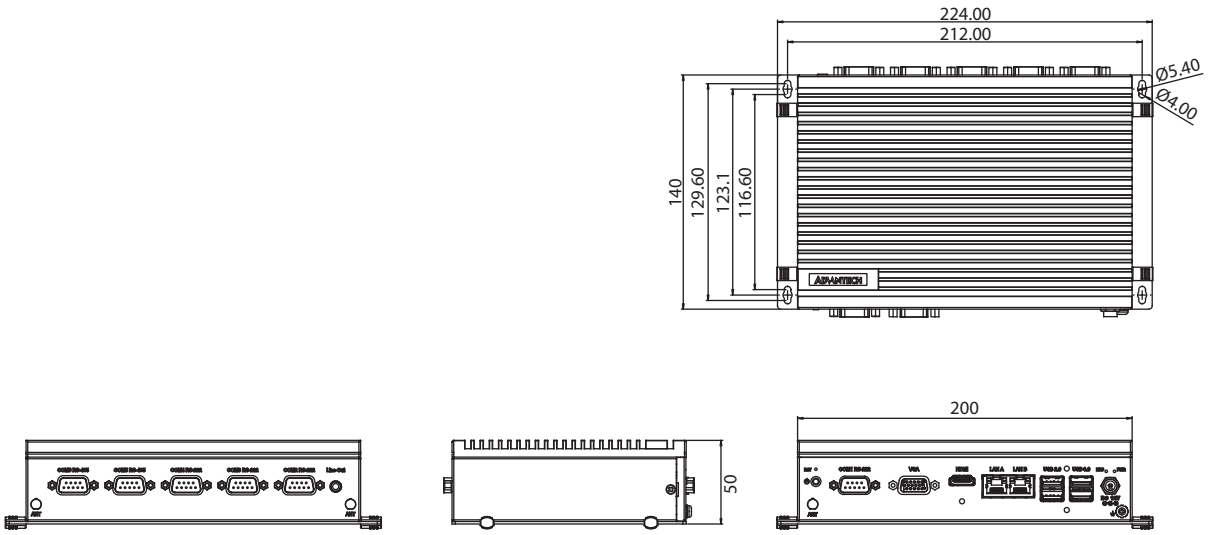
All product specifications are subject to change without notice.

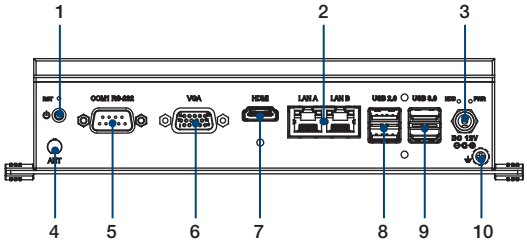
Last updated: 15-Jul-2020

Dimensions

Unit: mm

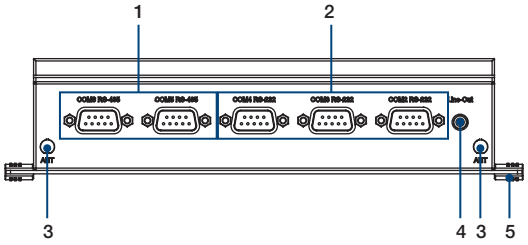


Front I/O View



1. Power button
2. RJ45 LAN
3. DC power
4. Reserved antenna socket
5. RS-232
6. VGA
7. HDMI
8. USB2.0
9. USB3.0
10. Chassis grounding

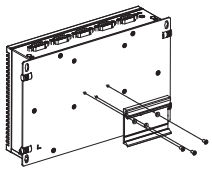
Rear I/O View



1. RS-485
2. RS-232
3. Reserved antenna socket
4. Line out
5. Rubber stopper

Installation Scenario

DIN-Rail Mount Illustration (with optional DIN-rail kit)



Optional Memory List

Operating Temperature	Memory Capacity	Part Number
0 ~ 50 °C/30 ~ 122 °F	2 GB	AQD-SD3L2GN16-SQ1
	4 GB	AQD-SD3L4GN16-SG1
	8 GB	AQD-SD3L8GN16-SG1
-20 ~ 60 °C/-4 ~ 140 °F	2 GB	SQR-SD3I-2G1K6SNLB
	4 GB	SQR-SD3I-4G1K6SNLB
	8 GB	SQR-SD3I-8G1K6SNLB

Ordering Information

- **ESRP-RMM-UNO247** UNO-247, 4G Memory, 120G SSD, Win10, DeviceOn

Optional Accessories

- **1700001524** Power cable 3-pin 1.8M, USA type
- **170203183C** Power cable 3-pin 1.8M, Europe type
- **170203180A** Power cable 3-pin, 1.8M, UK type
- **UNO-400-DMKAE** DIN-rail kit

Packing list

Part Number	Description
96PSA-A36W12W7-5	ADP A/D 100-240V 36W 12V WO/PFC