# Ei-U247

## Edge Intelligence System Powered By WISE-DeviceOn



#### **Features**

- Integrated hardware plus software to build up edge-to-cloud applications
- Powered by WISE-DeviceOn for IoT device remote and operation management
- Intel<sup>®</sup> Celeron<sup>®</sup> J3455 processor
- Robust design with high stability
- 2 x GbE, 2 x USB3.0, 2 x USB2.0, 4 x RS232, 2 x RS485, 1 x HDMI, 1 x VGA
- Compact size with fanless design
- Rubber stopper design for stand mount and optional kit for DIN-rail mount
- Optional 3G/GPS/GPRS/Wi-Fi communication
- Threaded DC Jack design for more steady power supply
- Optimized mechanical design for easier RAM swapping



### Introduction

Cloud-to-Edge system intergation is inevitably set to play an increasingly important role in IoT world. Ei-U247, 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 & Al 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")

Form Factor Regular SizeEnclosure Aluminum Housing

• Mounting Stand Mount, DIN-Rail (Optional)

Weight (Net)
1.0kg (2.2lbs)
Power Requirement
12V<sub>DC</sub>

Power Consumption 17W (Typical), 31W (Max)

• **OS Support** WIN10 IoT Enterprise LTSC V6.04 B016

#### **System Hardware**

BIOS AMI UEFI64 Mbit

• Watchdog Timer Programmable 255 levels timer interval, from 1 to 255

sec

**TPM** Support by project

Processor Intel® Apollo Lake Celeron® J3455 1.5GHz
 Memory 1 x slot (DDR3L SO-DIMM support up to 8GB)

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 drive bay for SATA 2.5" HDD (Compatible with 9.5mm height HDD)

■ Expansion 1 x Full size mPCle slot (PCle/ 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 2 x USB 3.0, 2 x USB 2.0

USB Ports
 Displays
 1 x HDMI 1.4b (3840x2160@30Hz)
 1 x VGA (1920x1080@60Hz)

**Power Connector** 1 x Lockable DC Jack

#### **Environment**

• Operating Temperature 0~50°C with 0.7m/s air flow

-20 ~ 60°C with 0.7m/s air flow (With extended temperature peripherals, refer to optional memory list

on page 2)

Storage Temperature -4

Relative Humidity
 Shock Protection

Vibration Protection

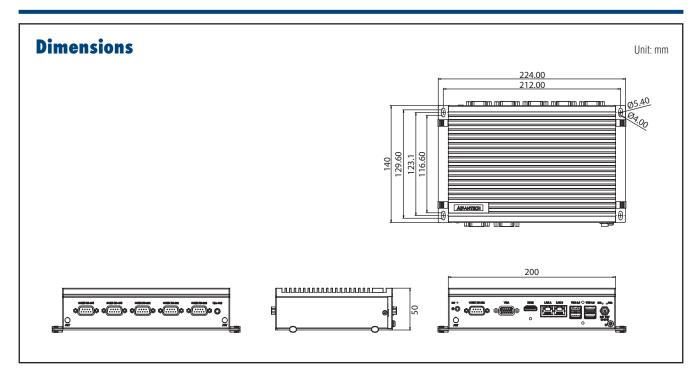
-40 ~ 85°C ( -40 ~ 185°F) 10 ~ 95% RH @ 40°C, non-condensing

Operating, IEC 60068-2-27, 50G, half sine, 11ms Operating, IEC 60068-2-64, 3Grms, random,

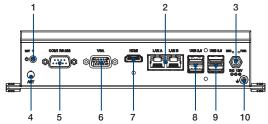
5 ~ 500Hz, 1hr/axis (mSATA)

Operating, IEC 60068-2-64, 0.5Grms, random,

5 ~ 500Hz, 1hr/axis (HDD)



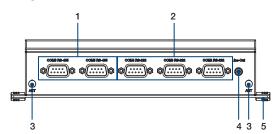
## Front I/O View



- Power Button
- 2. RJ45 LAN
- 3. DC Power
- 4. Reserved Antenna Hole
- 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 Hole
- 4. Line Out
- 5. Rubber Stopper

## **Installation Scenario**

#### **DIN-rail Mount Illustration (with optional DIN-rail kit)**



## **Ordering Information**

Ei-U247

UNO-247-J1N1AE w/ WISE-DeviceOn

## **Packing list**

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

## **Optional Memory List**

System operating Temperature	Memory capacity	Memory P/N
0~50°C	2GB	AQD-SD3L2GN16-SQ1
	4GB	AQD-SD3L4GN16-SG1
	8GB	AQD-SD3L8GN16-SG1
-20~60°C	2GB	SQR-SD3I-2G1K6SNLB
	4GB	SQR-SD3I-4G1K6SNLB
	8GB	SQR-SD3I-8G1K6SNLB

## **Optional Accessories**

- **1700001524**
- 170203183C
- 170203180A
- Power Cable 3-pin 1.8M, USA type Power Cable 3-pin 1.8M, Europe type Power Cable 3-pin, 1.8M, UK type
- UNO-400-DMKAE DIN Rail Kit