Ei-U247

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

NEW

powered by
WISE-DeviceOn

⊖ CCC CE FCC

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
- Optional 3G/GPS/GPRS/Wi-Fi communication capabilities
- 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. 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 & 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 V6.04 B016
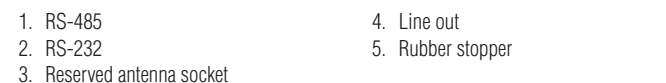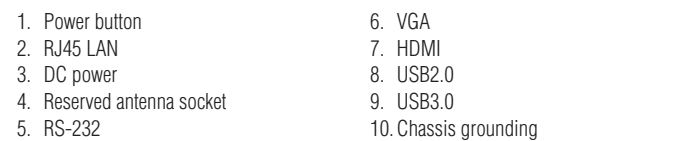
System Hardware

- **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 with built-in 4GB RAM
- **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)

ADVANTECH **Industrial IoT Gateways**

Last updated: 27-Jul-2021

Dimensions

Unit: mm

224.00
212.00
Ø5.40
Ø4.00
140
129.60
123.1
116.60
200
50

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)

Ordering Information

- **Ei-U247**   UNO-247-J1N1AE with WISE-PaaS/DeviceOn

Packing list

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

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

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