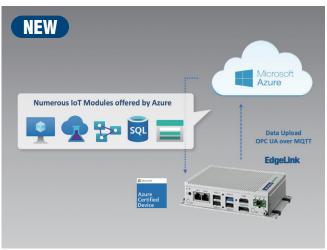
# ESRP-CSS-U2372V2

### **Azure IoT Edge Starter Kit with** UNO-2372G V2



#### **Features**

- Intel® Celeron® J6412 with 8GB DDR4, 256GB NVME
- Azure IoT Edge certified
- Extends cloud intelligence and analytics to edge devices
- Boosts productivity and response times with data insights
- · Support multiple southbound and northbound interface
- Offers secure cloud communication and edge intelligence









#### Introduction

ESRP-CSS-U2372V2 edge intelligence computer is a great solution for extending cloud intelligence and analytics to edge devices. IoT solutions, such as stream analytics, machine learning, image recognition, and other high-value Al modules can be deployed from Azure to the edge to support diverse applications. All data are collected and delivered to the cloud by EdgeLink. It supports more than 200 PLC devices for collecting data and features plug-and-play functionality which reduces software development time. This eliminates the gap between OT and IT. User guide is also provided for users to initialize Azure IoT Edge on UNO-2372G V2.

### **Feature Details**

#### Extends cloud intelligence and analytics to edge devices

Stream analytics, OPC UA publisher, Modbus, and other high-value AI modules can be deployed from the cloud to the edge to support diverse applications.

#### Boosts productivity and response times with data insights

Local data processing enables immediate decision-making and reduces bandwidth costs by minimizing the data transmitted from local devices to the cloud.

#### Support multiple southbound and northbound interface

EdgeLink is designed to connect to 200+ PLCs for data acquisition with zero coding. It also supports multiple protocols for unifying data sources, enhances data processing, and publishes data to cloud.

### **Specifications**

#### General

 Certification CE, FCC, UL, CCC, BSMI **Dimensions (W x D x H)** 150 x 105 x 35 (5.8" x 4.2" x 1.4")

Enclosure Aluminum housing

**Mount Options** Stand, wall, VESA (optional), DIN rail (optional)

Weight (Net) 0.8 kg (1.8 lb) **Power Requirement**  $10 \sim 36 \, V_{DC}$ 

**Power Consumption** 19W (Typical), 54W (Max)

Operating system Ubuntu 20.04

Software services

Edgelink Container version 2.8.3 Advantech EdgeManager 1.0.2 Advantech Auth-Server 1.8.1 Advantech iotedgecli 1.0.1 moby-engine 20.10.11+azure-3

Microsoft aziot-edge 1.2.10-1 (2022-05-27)

Microsoft aziot-identity-service 1.2.6-1 (2022-05-27) nodejs 10.19.0

#### **Hardware**

RINS AMI UEFI (64 Mbit) **Watchdog Timer** Programmable timer with 255 intervals (1 ~ 255 sec)

**Hardware Security** TPM2.0 Intel® Celeron® J6412 quad-core, 2.0 GHz **Processor** 

(max. turbo 2.6 GHz) Built-in 8 GB DDR4, 3200MHz, supports up to 32 GB Memory (single socket)

**Graphics Engine** Intel® UHD Graphics **Ethernet** 

Realtek® Ethernet Controller RTL8119I-CG Power, RTC battery, LAN (active, status), and HDD **LED Indicators** Stoarge 256GB NVME

**Expansion Option** 1 x mPCle (PCle/USB2.0 signal),

1 x M.2 B key (USB3.0 signal) for 3042/3052 cellular

1 x M.2 M key (PCIex2/SATA signal) for 2242 NVME/ SSD

1 x 2.5" SSD/HDD drive bay(up to 9.5 mm height)

#### 1/0

**Serial Ports** 4 x RS-232/422/485, DB9, 50 ~ 115.2kbps LAN 2 x RJ45, 10/100/1000 Mbps IEEE 802.3u 1000BASE-T Fast Ethernet

USB 3 x USB 3.2 GEN2. 1 x USB2.0 **Displays** 1 x HDMI 1.4 (3840 x 2160 @30 Hz) 1 x DP 1.4 (4096 x 2160 @60 Hz) **Power Connector** 1 x 2-pin terminal block

Audio Line-out

### **Environment**

• Operating Temperature  $-20 \sim 60 \,^{\circ}\text{C/}-4 \sim 140 \,^{\circ}\text{F} \ @ 5 \sim 85\% \, \text{RH}$  with 0.7m/s

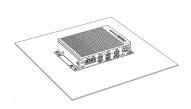
airflow - 40 ~ 85 °C/-40 ~ 185 °F **Storage Temperature** 

**Relative Humidity** 10 ~ 95% RH @ 40 °C/104 °F, non-condensing Operating, IEC 60068-2-27, 50G, half sine, 11ms **Shock Protection Vibration Protection** Operating, IEC 60068-2-64, 2Grms, random, 5 ~ 500Hz, 1hr/axis (SSD)

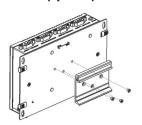
Ingress Protection IP40 (Base unit)

### **Installation Scenario**

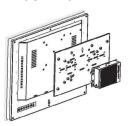
Stand/Wall Mount

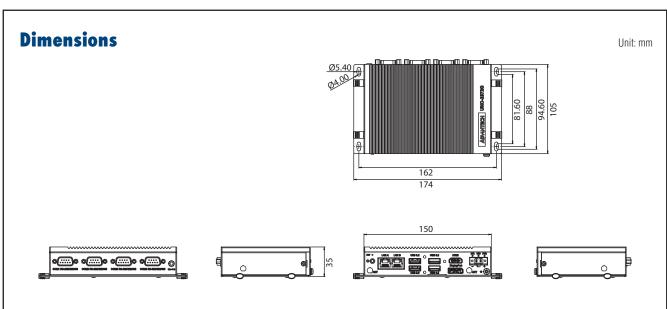


**DIN-Rail Mount (Optional)** 



**VESA Mount (Optional)** 





## **Ordering Information**

**ESRP-CSS-U2372V2** Azure IoT Edge Starter Kit with UNO-2372G V2

### **Optional Accessories**

**96PSA-A60W24T2-3** A/D 100 ~ 240V 60W 24V C14 cord end terminal

power adapter

1702002600 Power cable, US plug, 1.8 m (industrial grade)
1702002605 Power cable, EU plug, 1.8 m (industrial grade)
1702031801 Power cable, UK plug, 1.8 m (industrial grade)
1700000596 Power cable, China/Australia plug, 1.8 m (industrial

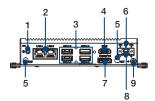
grade)

UNO-2000G-DMKAE
UNO-2000G-VMKAE
UNO-2000 VESA mount kit
UNO-2000-LKAE
Cable locking kit, 10 units per pack

UNO-REPWR-AE
Remote power and reset control kit for UNO (\* Need to

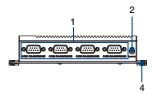
use with UNO-2372G-EKCE)

### Front I/O



- 1. Power button
- 2. RJ45 LAN
- 3. 3 x USB 3.2 GEN1, 1 x USB2.0
- 4. HDMI 1.4
- 5. Reserved antenna
- 6. Power, Battery, HDD LEDs
- 7. DisplayPort 1.4
- 8. Power connector
- 9. Chassis grounding

### Rear I/O



- 1. RS-232/422/485
- 2. Line-out
- 3. iDoor expansion slot
- 4. Rubber stopper

Please note: If some optional modules are offered with the system, additional system certificates may be required in certain regions/countries. Please contact Advantech for certificate compliance.