

ESRP-AWS-U2372

Amazon IoT Greengrass Starter Kit with UNO-2372



Features

- Extends cloud intelligence and analytics to edge devices
- Boosts productivity and response times with data insights
- Advantech Edgelink for downlink and uplink support
- Compact, robust, fanless and cable-free system with high stability

Introduction

ESRP-AWS-U2372 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 AI modules, can be deployed from the Amazon Web Services (AWS) to the edge to support diverse applications. All data are collected and delivered to the cloud by WISE-EdgeLink. It supports more than 200 PLC devices for collecting data and features plug-and-play functionality which reduces software development time. This also eliminates the gap between OT and IT.

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.

Advantech Edgelink provides downlink and uplink support

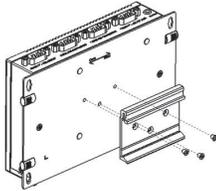
Edgelink supports more than 200 PLC protocol drivers for collecting data from devices and features plug-and-play functionality which reduces software development time.

Specifications

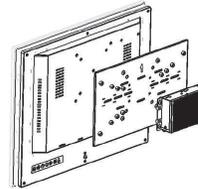
System Hardware	Processor	Intel® Celeron® Quad Core J3455 1.5 GHz (max. turbo 2.3 GHz)
	Memory	Built-in 4 GB DDR3L, 1866 MHz
	Ethernet	Intel® i210, IEEE 802.1Qav, 802.1AS, 802.3az
	Hardware Security	TPM 2.0
	Storage	64G SSD
	Expansion	2 x Full-size mPCIe slots
	Bios	AMI UEFI (64 Mbit)
	Watchdog Timer	Programmable timer with 255 intervals (1 ~ 255 sec)
	LED Indicators	Power, RTC battery, LAN (active, status), and HDD
	I/O Interfaces	Serial Ports
LAN Ports		2 x RJ-45, 10/100/1000 Mbps IEEE 802.1u 1000BASE-T fast ethernet
USB Ports		4 x USB 3.0
Displays		1 x HDMI 1.4b (3840 x 2160 @30 Hz) 1 x DP 1.2 (3840 x 2160 @60 Hz)
Power Connector		1 x 2-Pin, Terminal Block
General	Certification	CE, FCC, UL, CCC, BSMI
	Dimensions (W x D x H)	Single stack: 150 x 105 x 35 mm
	Form Factor	Small size
	Enclosure	Aluminum housing
	Mounting	Stand, wall, VESA (optional), DIN-rail (optional)
	Weight (Net)	Single-stack model: 0.8 kg (1.8 lb)
	Power Requirement	10 ~ 36 V _{DC}
Power Consumption	18.36W (typical)	
Software	Operating System	Ubuntu 18.04, Kernel 4.15.0-43-generic
	Application	AWS Greengrass Core 1.10.0, AWS Greengrass Core SDK, Node.js 1.6.0, Docker engine 20.10.7, Node.js 12.x, Java 1.8.0_172, Python 3.6.7, EdgeLink-Linux v2.7.3, EdgeManager 1.0.0, AuthServer r3678, wise-agent 1.4.32.0
Environment	Operating Temperature	-20 ~ 60 °C (-4 ~ 140 °F) @ 5 ~ 85% RH with 0.7 m/s airflow
	Storage Temperature	-40 ~ 85 °C / -40 ~ 185 °F
	Relative Humidity	10 ~ 95% RH @40 °C, non-condensing
	Shock Protection	Operating, IEC 60068-2-27, 50G, half sine, 11 ms
	Vibration Protection	Operating, IEC 60068-2-64, 2 Grms, random, 5 ~ 500 Hz, 1hr/axis (mSATA) Operating, IEC 60068-2-64, 0.75 Grms, random, 5 ~ 500 Hz, 1hr/axis (HDD)
Ingress Protection	IP40	

Installation Scenario

DIN-Rail Mount Illustration

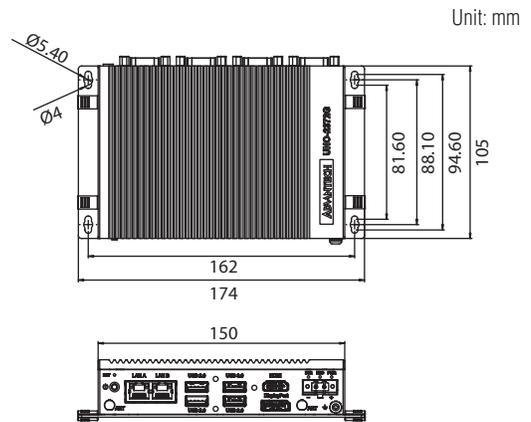
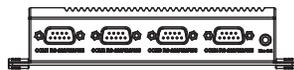


VESA Mount Illustration



Dimensions

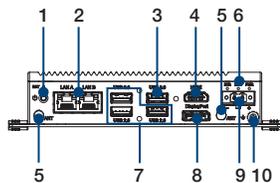
Single Stack



Unit: mm

Front I/O View

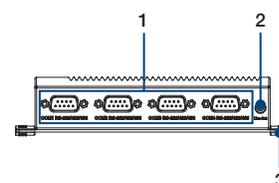
Single Stack



- | | |
|---------------------|------------------------------|
| 1. Power Button | 6. BTR, HDD & PWR LED Lights |
| 2. RJ-45 LAN | 7. USB |
| 3. USB | 8. DisplayPort |
| 4. HDMI | 9. Power Connector |
| 5. Reserved Antenna | 10. Chassis Grounding |

Rear I/O View

Single Stack



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|-------------------|-------------------|
| 1. RS-232/422/485 | 3. Rubber Stopper |
| 2. Line-Out | |

Ordering Information

- ESRP-AWS-U2372 Amazon IoT Greengrass Starter Kit with UNO-2372

Optional Accessories

Operating system

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