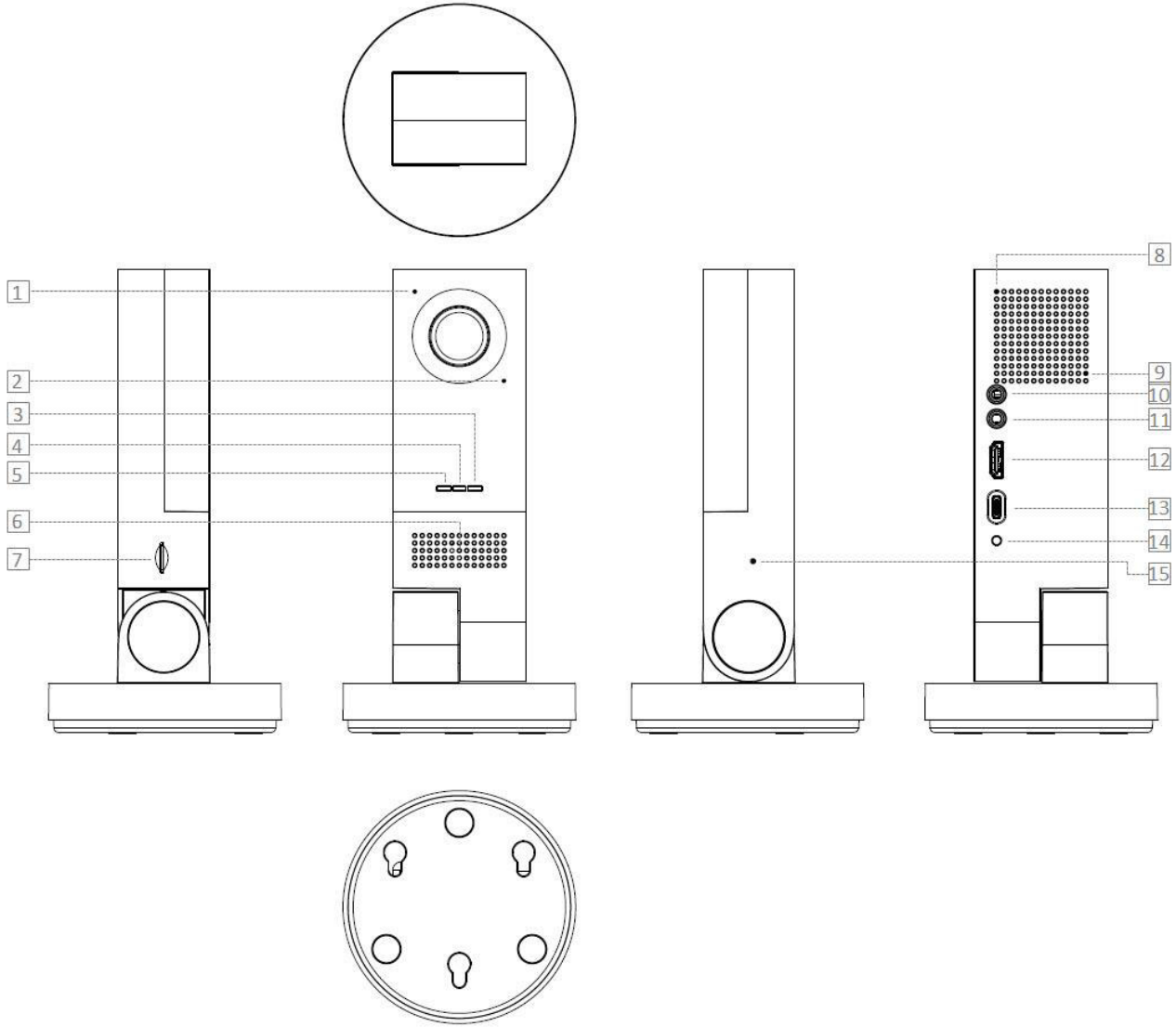
Altek AI Camera
Quick Start

altek
The Imaging Expert

Product Specifications

- Model name: AICAMX2
- Sensor: 1/1.8“ CMOS
- Max resolution: 8MP
- Operating temperature: -10℃ ~ 40 ℃
- Focal Length: 4mm
- F number: F1.8
- USB: Type C (DC in only)

Parts and Controls



1. MICROPHONE 1
2. MICROPHONE 2
3. INDICATING LED 1
4. INDICATING LED 2
5. INDICATING LED 3
6. SPEAKER
7. MICRO SD SLOT
8. MICROPHONE 3
9. MICROPHONE 4
10. LINE/IN
11. LINE/OUT
12. HDMI PORT
13. USB PORT
14. POWER BUTTON
15. RESET

Before start

- Register account at https://azure.microsoft.com/
- Log in by your azure account to Azure portal.
- Choose + **Create a resource**, then choose **Internet of Things**.

  Then, create your own Iot hub and Iot Edge

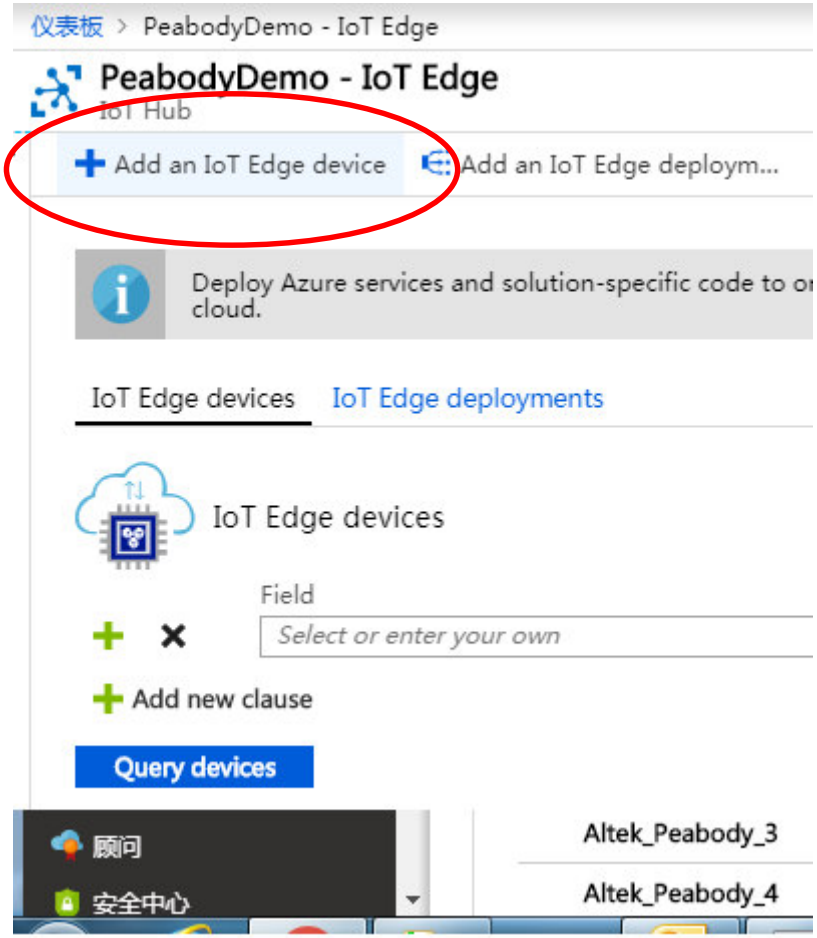
  (Refer to https://docs.microsoft.com/en-us/azure/iot-fundamentals/ for detail)
- Choose + **Create a resource**, then choose **Internet of Things**.

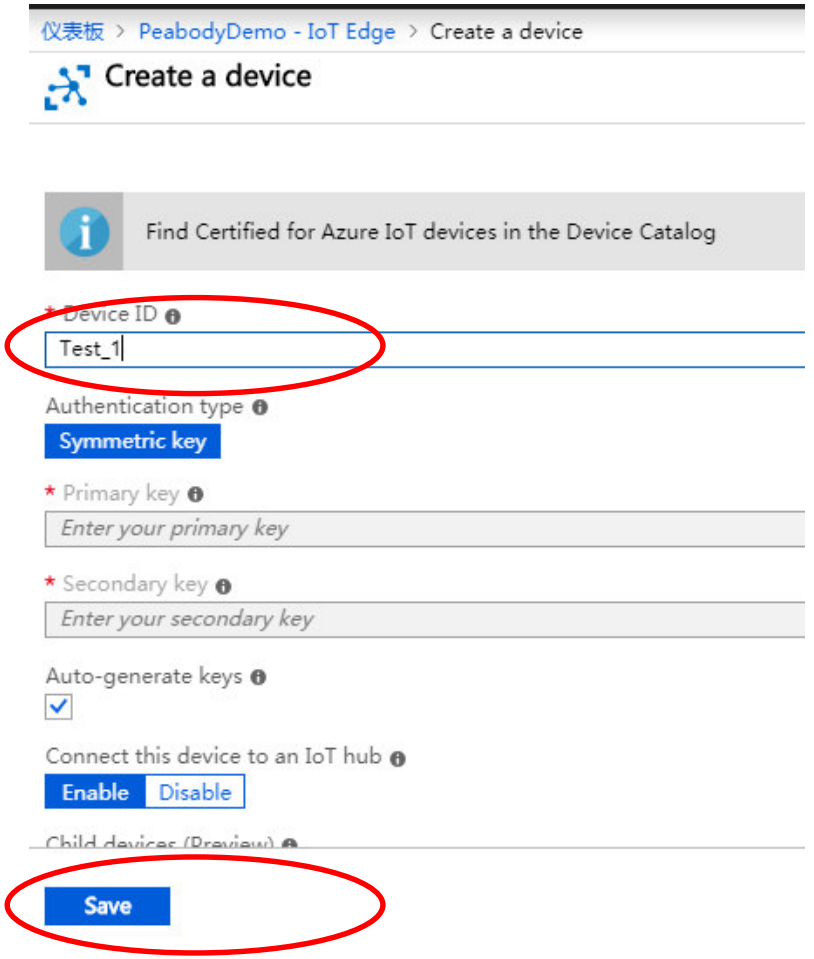
  Then, create your own Iot hub and Iot Edge
- Copy the value of either **Connection string—primary key** or **Connection string—secondary key** to a notepad that you will use later.

  A connection string looks like

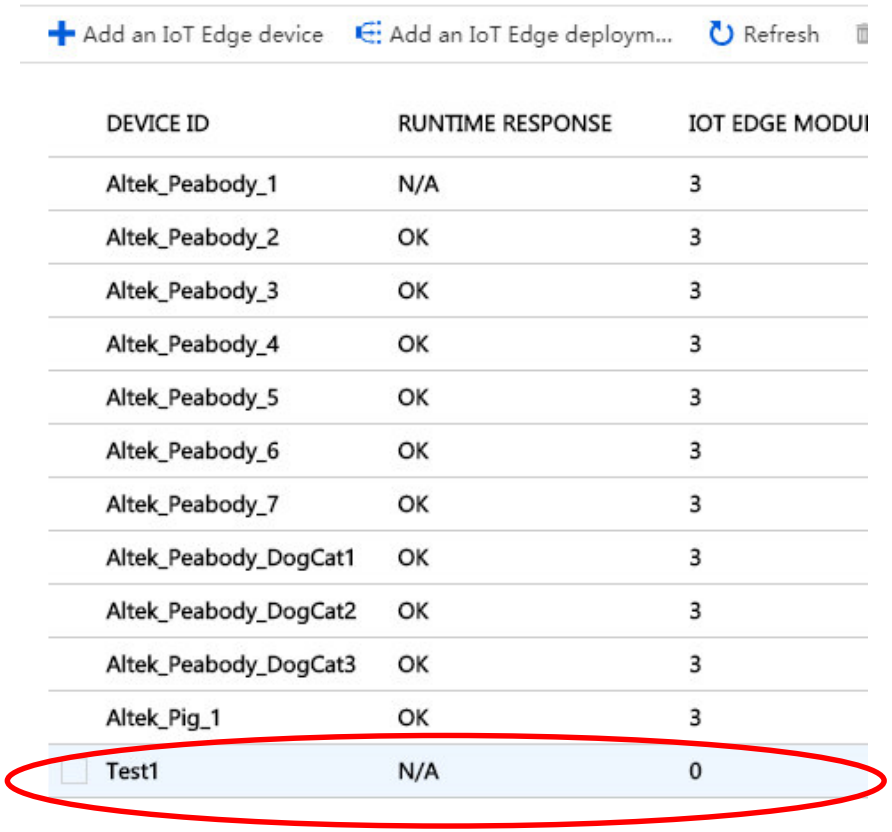
  HostName=xxxxxxxxxx.azure-devices.net;DeviceId=xxxxxxxxxxx;SharedAccessKey=xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

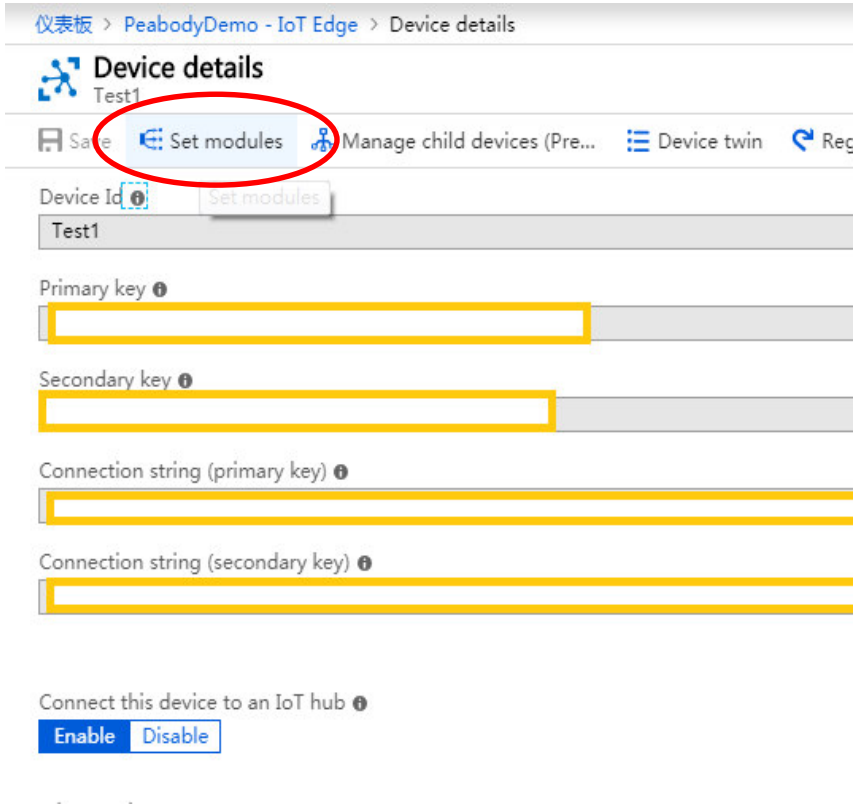
Add iot edge device at Azure cloud



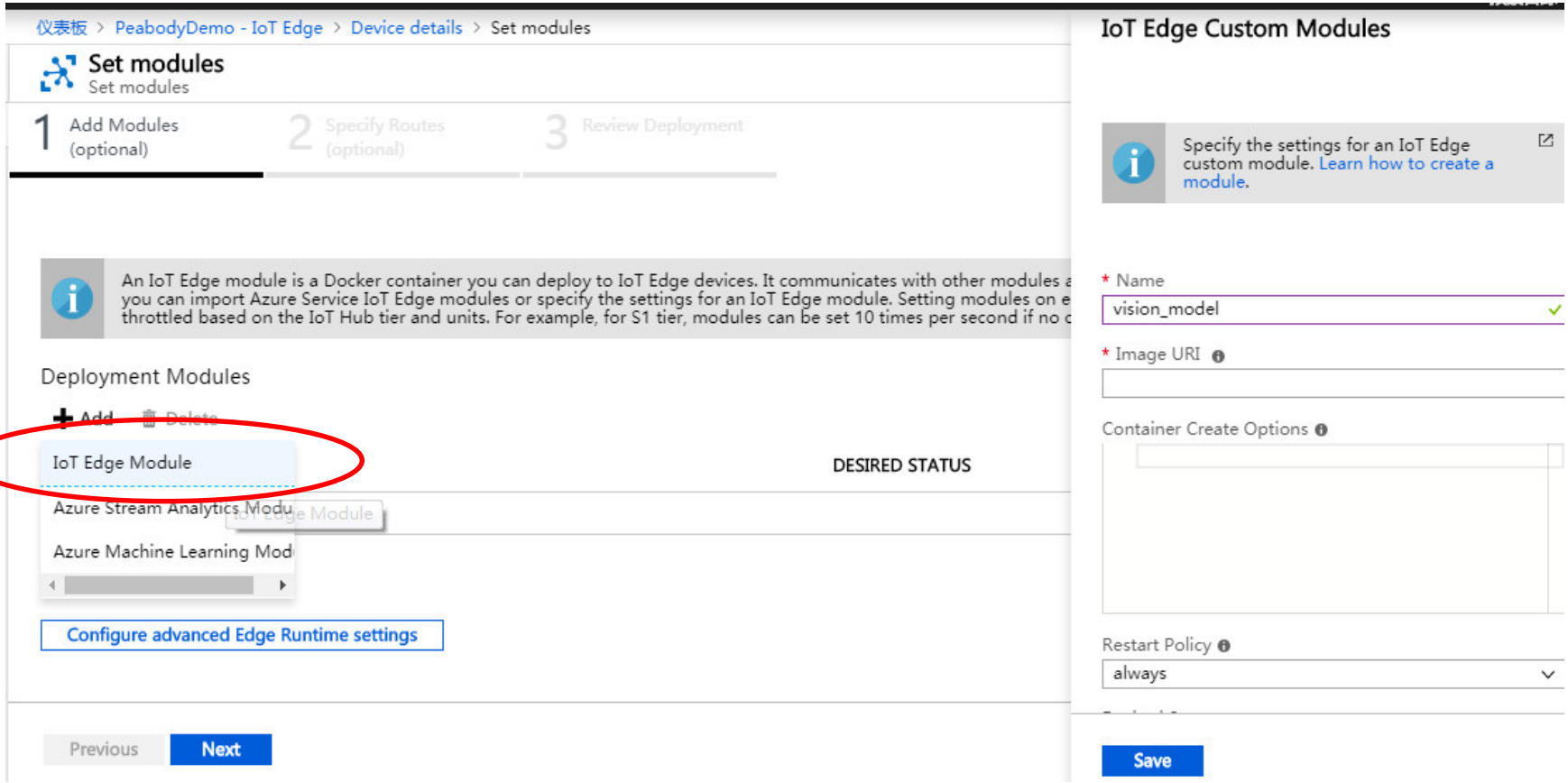


Select your device , and set module

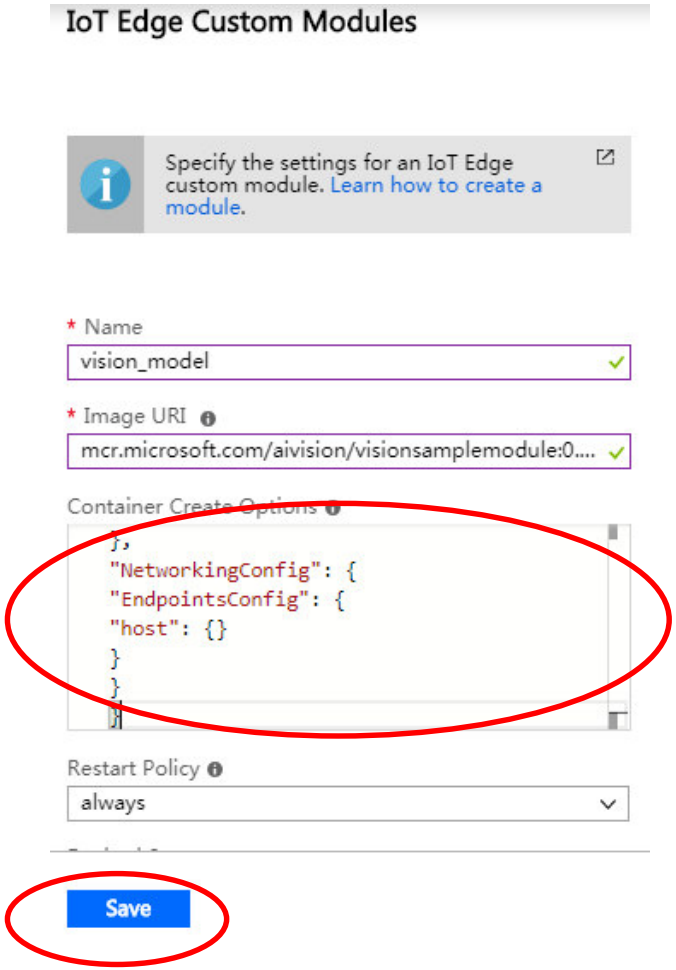




Add Iot Edge module



Setup for vison module

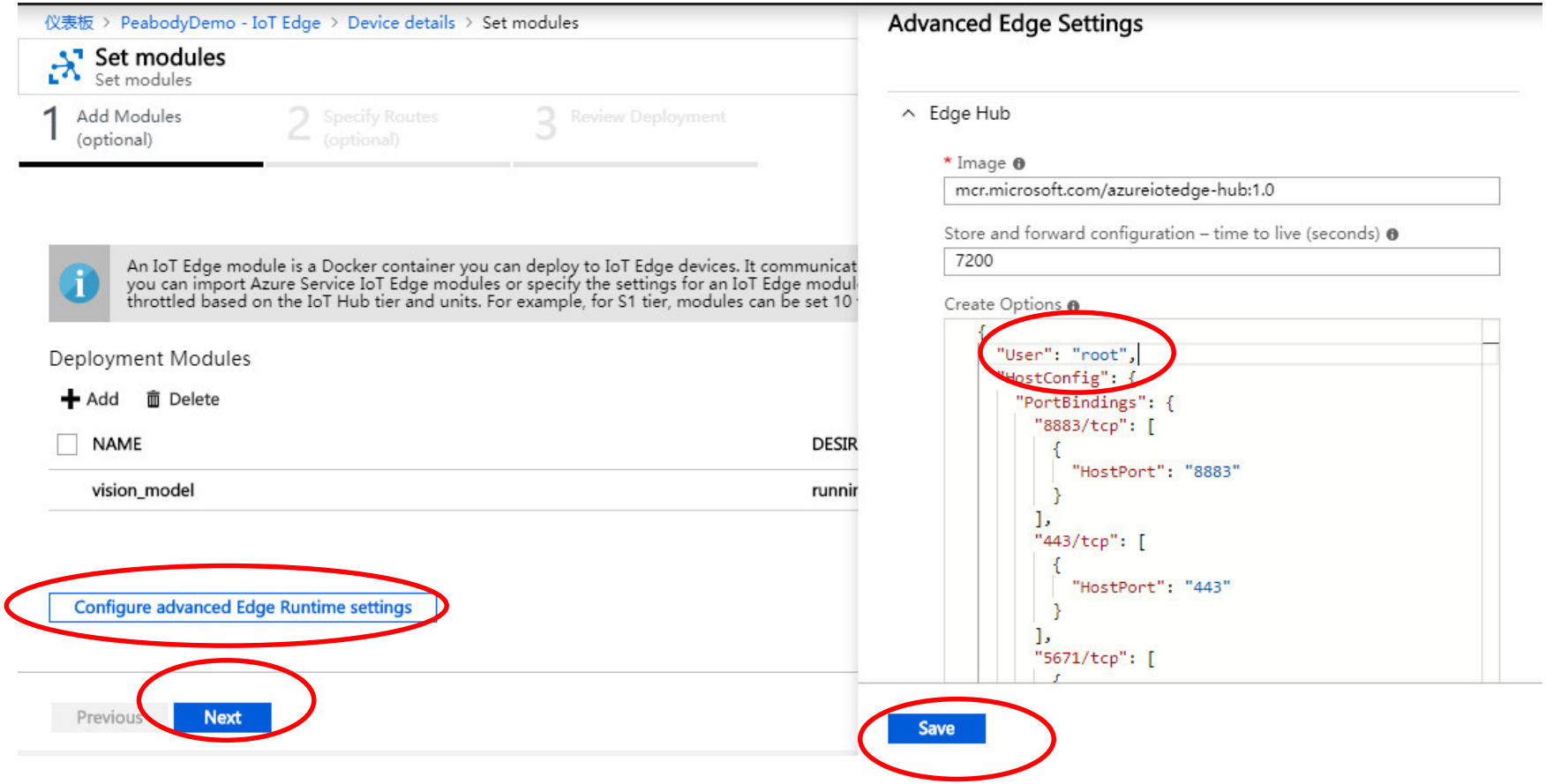


- **codes snippet in Container Create Options**

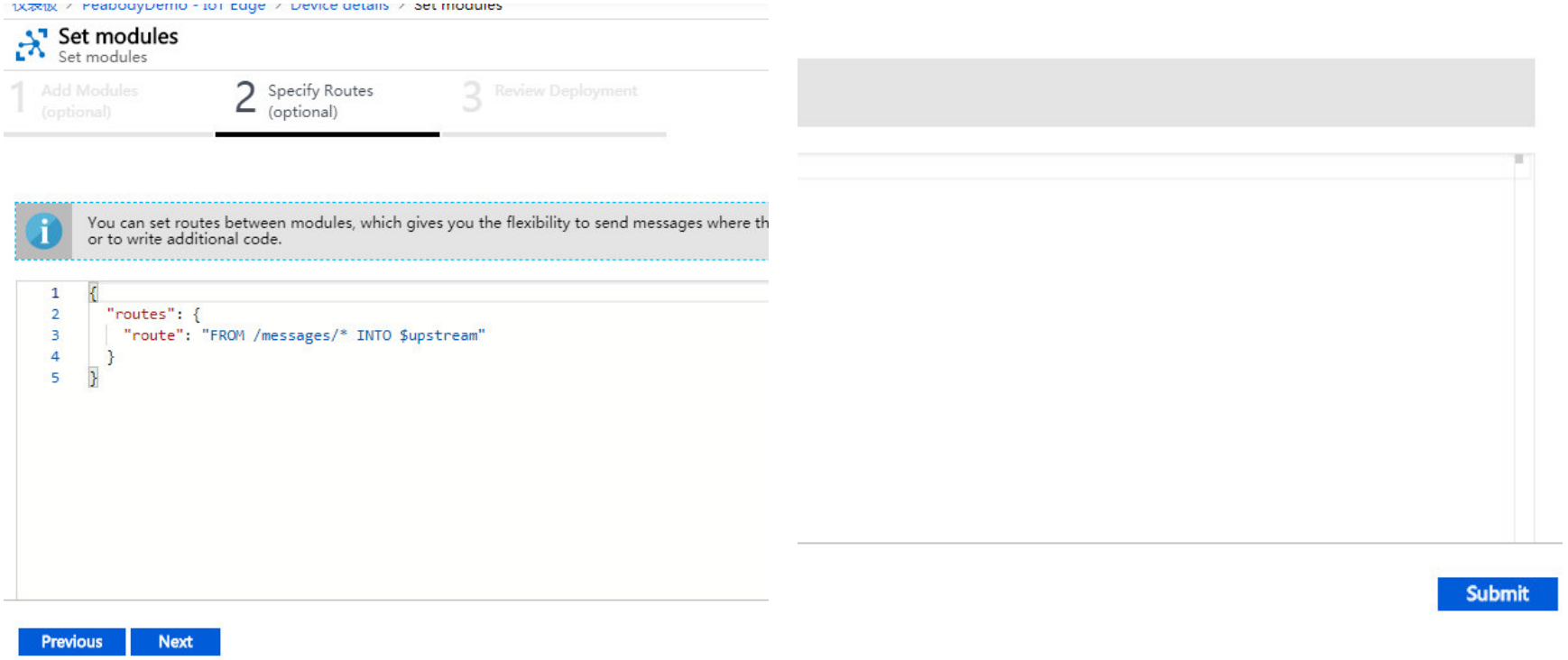
```
{
"HostConfig": {
"Binds": [
"/data/misc/camera:/app/vam_model_folder"
],
"NetworkMode": "host"
},
"NetworkingConfig": {
"EndpointsConfig": {
"host": {}
}
}
}
```

- **Press “Save” once above ready**

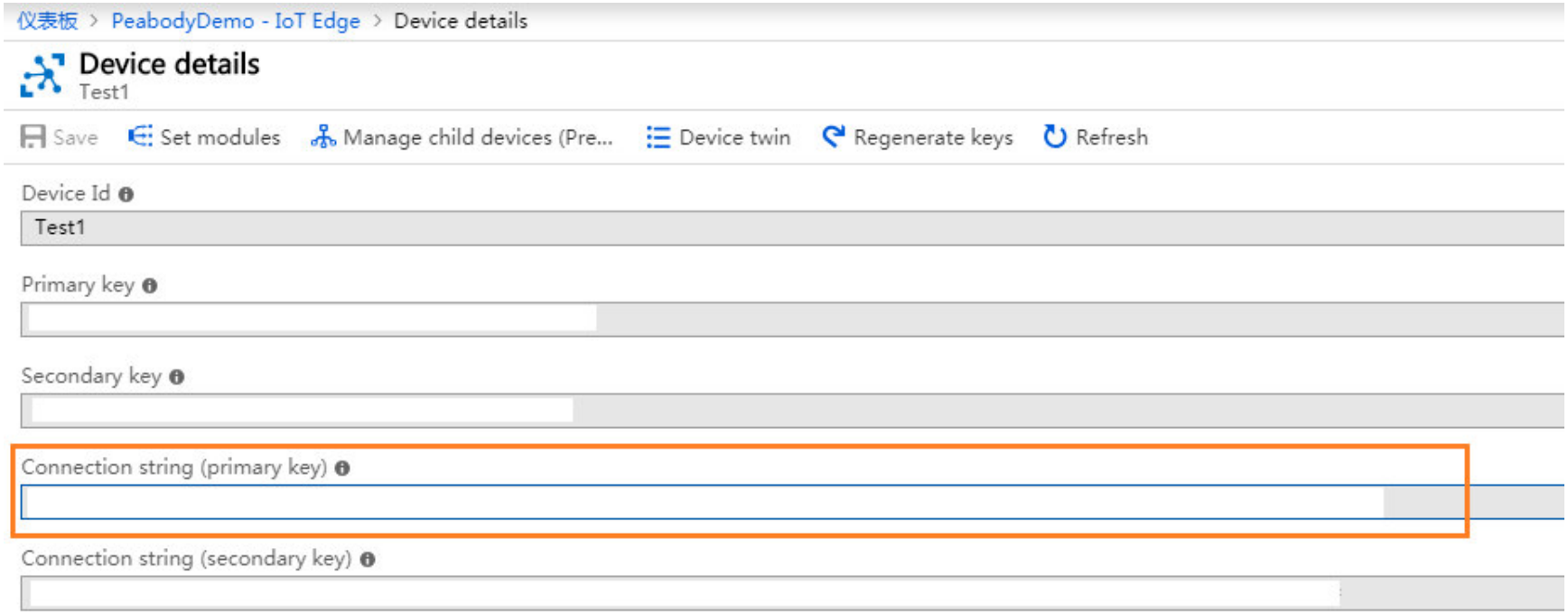
Click *Configure advanced Edge Runtime settings* button at the bottom and add this line "User": "root", in Create Options. Then, press save and next



Submit your setting



Get connection string from azure cloud first.
Then, input connection string by OOBE process to device



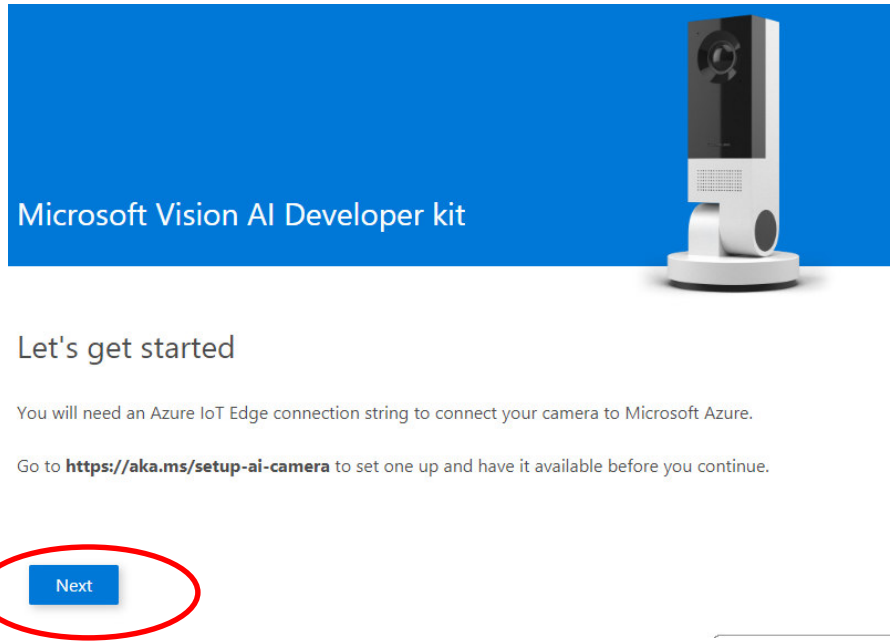
OOBE by webpage -1

- Connect device with PC via Wi-Fi

You can check your SSID and password at bottom of device

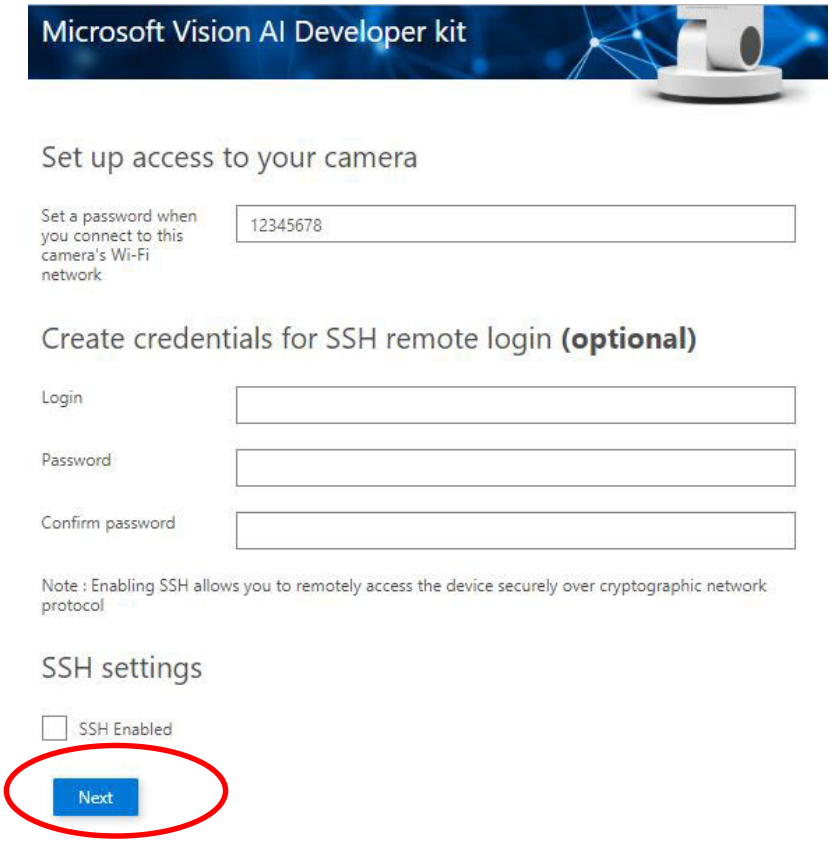
(Default password is 12345678 if there is no label at bottom)

- URL: setaicamera.ms

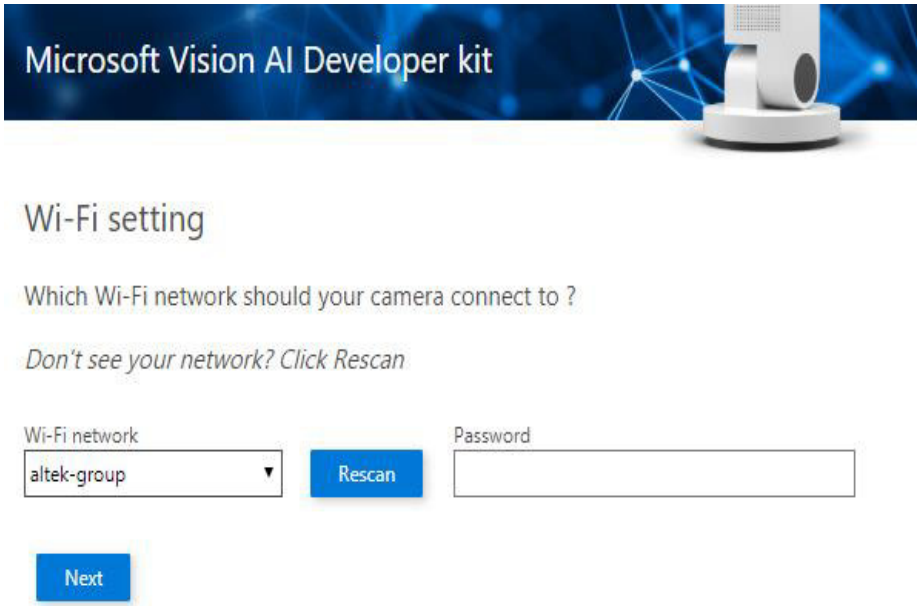


OOBE by webpage -2

- Press next directly at 1st page if you don't want change device wi-fi password and ssh account

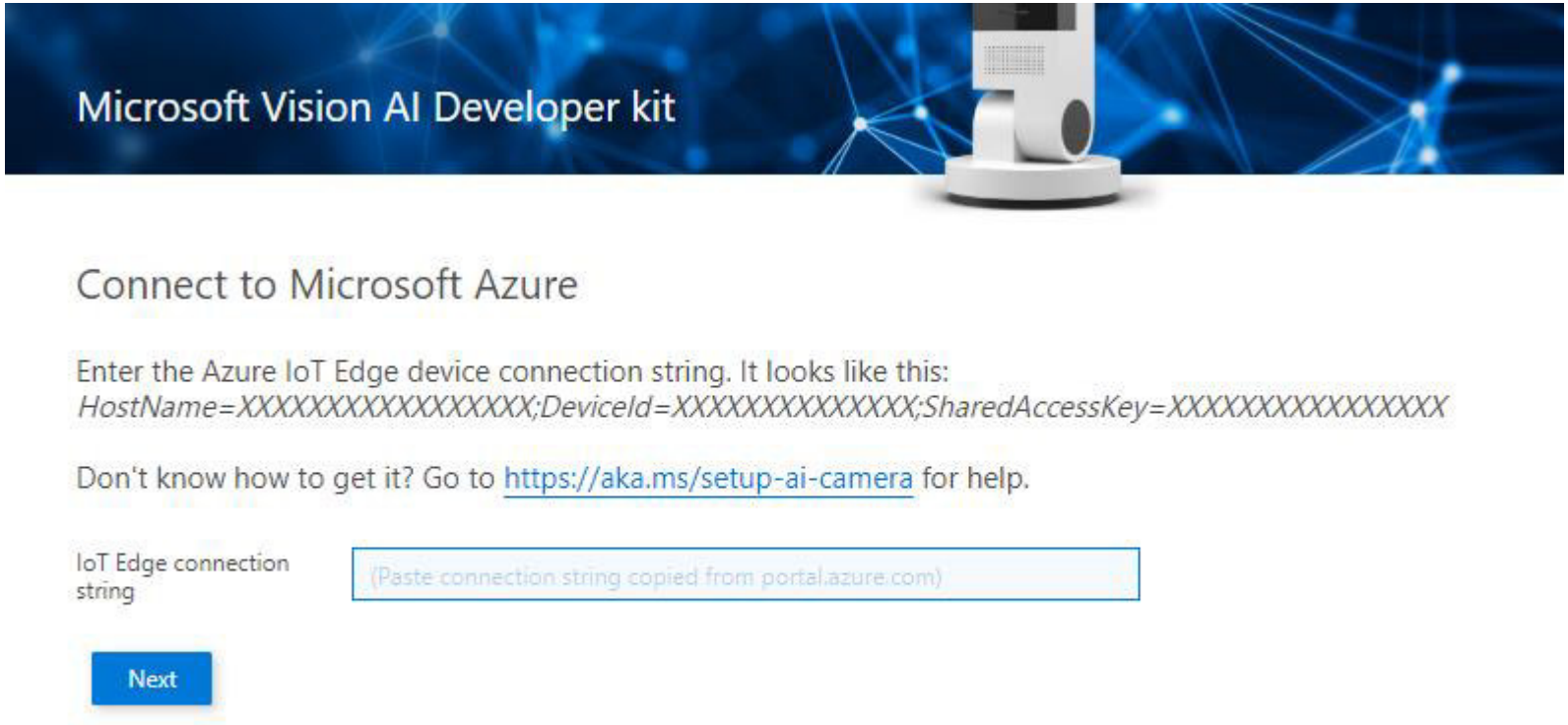


- Scan and select available wi-fi ap for internet access



OOBE by webpage -3

- Input your connect string at webpage



Connection to Iot Edge

- After OOBE, wait for connection confirmation feedback from web site once edgeAgent is run
- You can check by below adb shell cmd
  - ‘docker ps

```
/ # docker ps
CONTAINER ID        IMAGE
                COMMAND                  CREATED             STATUS
    PORTS                                                                NAMES

8429cb2485b8        mcr.microsoft.com/aivision/visionsamplemodule:1.0.3_demo_obj
detect-arm32v7   "python3 -u ./var/az??    About a minute ago   Up 57 seconds
                                                                     AI_Vi
sionMode_103
9928f1529ead        mcr.microsoft.com/azureiotedge-hub:1.0
                "/bin/sh -c 'echo \"$??   5 minutes ago        Up 50 seconds
    0.0.0.0:443->443/tcp, 0.0.0.0:5671->5671/tcp, 0.0.0.0:8883->8883/tcp   edgeH
ub
842231945fd2        mcr.microsoft.com/azureiotedge-agent:1.0
                "/bin/sh -c 'echo \"$??   6 minutes ago        Up 6 minutes
                                                                     edgeA
gent
```

- Device will automatically run Iot Edge next boot-up no matter internet is available or not

Notices for Customers in Europe

CAUTIONS

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.

DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

This symbol indicates that electrical and electronic equipment is to be collected separately.

The following apply only to users in European countries:

- This product is designated for separate collection at an appropriate collection point. Do not dispose of as household waste.
- Separate collection and recycling helps conserve natural resources and prevent negative consequences for human health and the environment that might result from incorrect disposal.
- For more information, contact the retailer or the local authorities in charge of waste management.

This symbol on the battery indicates that the battery is to be collected separately.

The following apply only to users in European countries:

- All batteries, whether marked with this symbol or not, are designated for separate collection at an appropriate collection point. Do not dispose of as household waste.
- For more information, contact the retailer or the local authorities in charge of waste management.

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/ TV technician for help.

CAUTION:

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

RF Exposure Information (SAR)

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. Tests for SAR are conducted using standard operating positions accepted by the FCC with the EUT transmitting at the specified power level in different channels.

The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of www.fcc.gov/eot/ea/fccid after searching on FCC ID: **2ACQ9-16880002**

To ensure that RF exposure levels remain at or below the tested levels, use a belt-clip, holster, or similar accessory that maintains a minimum separation distance of 5mm between your body and the device.