



# Grove Starter Kit for Azure IoT Edge

SKU 110060907

## Description

The Grove Starter kit for Azure IoT Edge is a joint-effort developed by Microsoft and Seed Studio. The kit integrates Azure IoT Edge service and SeedStudio's most popular modular ready-to-use tool set – Grove, aims at helping developers get started quickly and conveniently with Azure IoT Edge.

Azure IoT Edge is a fully managed service that delivers cloud intelligence locally, With Azure IoT Edge, you can seamlessly deploy and run artificial intelligence, Azure services, and custom logic directly on cross-platform IoT devices—from a small Raspberry Pi to large industrial machines. And manage it all centrally in the cloud with the security of Microsoft.

The kit includes the latest Raspberry Pi 3 B+ to run Edge, 4 well-selected Grove modules that act as sensors, display, and actuator. There are also a 4-Mic Pi Hat and a Raspberry Pi Camera Module in this kit, which brings more possibilities to applications like Face & Vision recognition, Speech recognition, and LUIS etc. with Microsoft's cognitive services. What's more, the kit also includes a 16GB SD card with pre-configured Raspbian image to bring out-of-the-box experience for the users.

### Three Scenarios to Get Started

#### 1. Environment Monitor

When deployed to a device, code in the temperature-sensor project collects temperature and barometric data from the Raspberry Pi temperature sensor and sends it to an Azure IoT Hub.

#### 2. Image Classifier

When deployed to a device, code in the image-classifier project captures video from the Raspberry Pi camera, sends images from the video to an AI module running image classification, displays the results on the OLED display, and sends results to an Azure IoT Hub.

#### 3. Speech Recognizer

When deployed to a device, code in the speech-recognizer project captures audio from the Raspberry Pi microphone, uses an AI module to recognize the speech and determine intent, responds with an appropriate response on the OLED display, and sends results to an Azure IoT Hub.

### Technical Details

Weight	G.W 400g
Battery	Exclude

## Part List

Raspberry Pi 3 Model B+	1
ReSpeaker 4-Mic Array for Raspberry Pi	1
Raspberry Pi Camera Module V2	1
Grove - Temp & Humidity & Barometer Sensor (BME280)	1
Grove - 3-Axis Digital Accelerometer	1
Grove - Buzzer	1
Grove - OLED Display 0.96"	1
16GB SD Card	