**ESPNow**

ESPNow is a linkless, peer to peer communication protocol developed by Espressif. The protocol works by having each ESP32 module continuously forward messages to each other, then ultimately to a ground station. These broadcasts are encrypted and each ESP32 must be set up using the same password.

Dronebridge for ESP32 provides an easy way to integrate ESPNow into a drone swarm. Each ESP32 module is assigned as an “AIR” station, with one “GND” station. The AIR station modules communicate with the drone flight controller through a UART interface, while the GND station is connected to a computer through a UART to USB adapter. Once installed, the AIR stations will automatically forward messages to the GND station and computer.

**Steps to Install ESPNow**

1. Install [Dronebridge](https://dronebridge.github.io/ESP32/index.html) onto each ESP32 module through the USB port
2. Connect to the wifi network
3. Open a browser and type “dronebridge.local”
4. Select the mode as an AIR station or GND station, set CTS and RTS pins to 0 to disable flow control
5. Keep UART baud at 115200
6. Click save settings and reboot
7. Ensure there is a UART to USB link from the GND station to the computer