balena-powered Indoor Air Quality device [IAQ]

How it works:

The IAQ device uses a CO_2 and particulate sensor to generate an indoor air quality score which it displays using an LED matrix on the front of the unit. The score ranges from 0 (best air quality) to 99 (hazardous air quality).

The LED display changes color based on the score as follows:

Score range	Description	LED color
0 - 49	Good air quality	green
50 - 74	Moderate air quality	orange
75 - 99	Hazardous air quality	red

Setup:

1. Power the device using the 5V micro-USB jack on the left side.
2. Connect to WiFi: The device includes WiFi-Connect. Connect to the opened access point on the device from your mobile phone or laptop. The access point SSID is, by default, "WiFi Connect"
3. After connecting to the access point from a mobile phone, it will detect the captive portal and open its web page. Opening any web page will redirect to the captive portal as well.
4. The captive portal provides the option to select a WiFi SSID from a list with detected WiFi networks and enter a passphrase for the desired network.
5. When the network credentials have been entered, WiFi Connect will disable the access point and try to connect to the network. If the connection fails, it will enable the access point for another attempt.
6. See https://github.com/balena-os/wifi-connect for more details

More info:

Project repo: https://github.com/balena-io-playground/balena-iaq (for now)
Fleet: balena-labs: balena-iaq
Contact: @alanb128, @chrisys