Internet of Things Lab

Challenge 1 – Supporting Files

CSV Files

- CSV file are raw measurements coming from the current monitor sensor.

- Each file contains power measurement in mW of the Esp32 board, at different stages described in the following slides.

- Each csv file is characterized by a Timestamp column and the Power measurement.

- You can use this measurements to compute the Power and Energy consumptions.
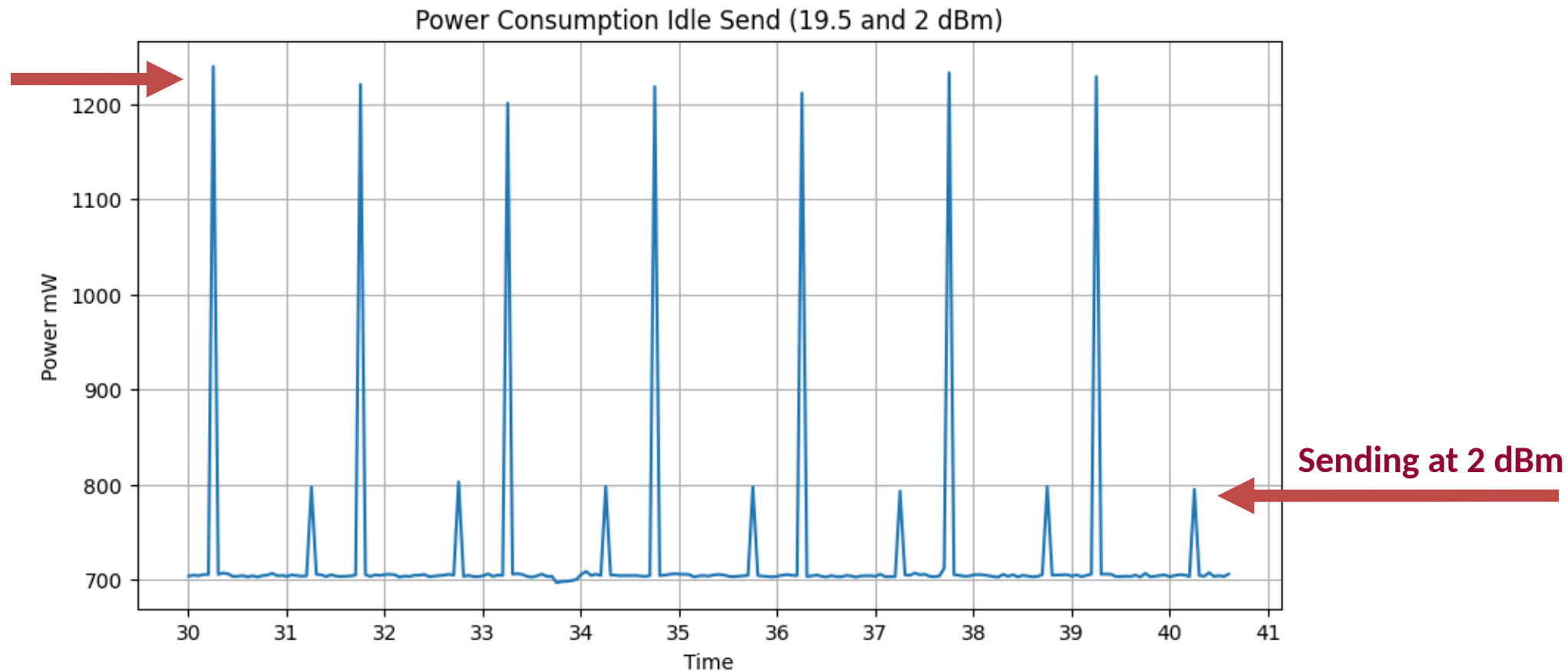
Timestamp	Data
2024-03-03 20:14:47.705952	59.89
2024-03-03 20:14:47.756244	59.5
2024-03-03 20:14:47.805842	59.82

ANTLAB

Transmission power

Measured Output

Sending 19.5 dBm Default value

Sending at 2 dBm

Power Consumption Idle Send (19.5 and 2 dBm)

Deep Sleep with Interrupt

Measured Output

Power Consumption (Deep Sleep - Idle - WiFi On - WiFi Off)
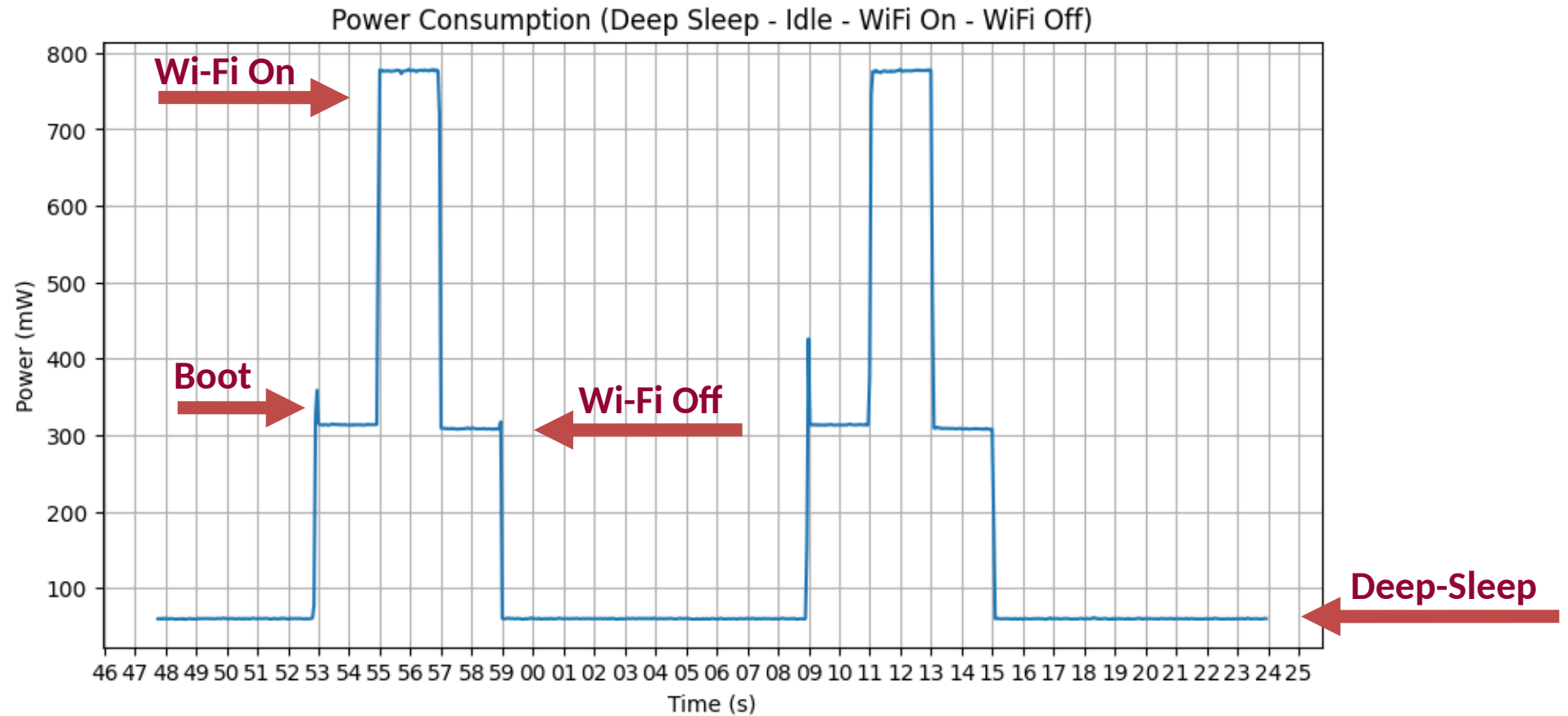
Sensor Reading
(Ultrasonic Distance Sensor - HC-SR04)

Measured Output

Power Consumption (Idle - Sensor Read)

Sensor Reading

Idle