



**POLITECNICO**  
**MILANO 1863**

SCUOLA DI INGEGNERIA INDUSTRIALE  
E DELL'INFORMAZIONE

# IoT Challenge #1, Wokwi and Power Consumption

INTERNET OF THINGS

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Academic Year: 2024-2025

Version: 1.0

Release date: 20-3-2025



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# 1 | Code explanation



## 2 | Energy consumption estimation

Power consumption estimation Average Idle duration: 833.6985294117648 uS Average Measurement duration: 18647.79411764706 uS Average Sending duration: 59.6044776119403 uS Average WiFi duration: 188640.86842105264 uS

Battery size 18593 J

Average power consumption Average power consumption deep sleep: 59.66093555093555 mW Average power consumption WiFi on: 724.5793571428571 mW Average power consumption transmission at 2dBm: 797.2942857142858 mW Average power consumption idle: 322.62464743589743 mW





## 3 | Improvements



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