

# The Internet of Things Energy Considerations

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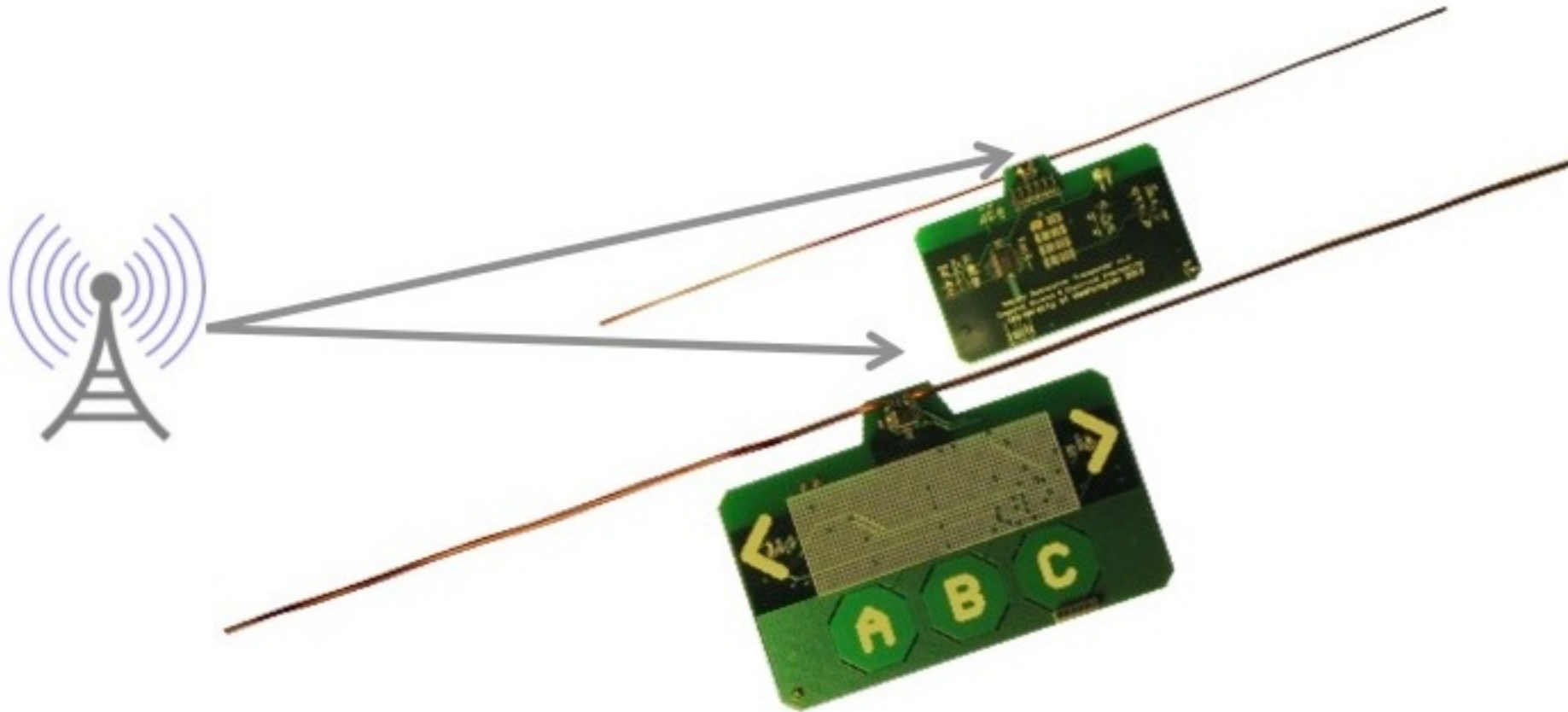
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# Energy System Considerations

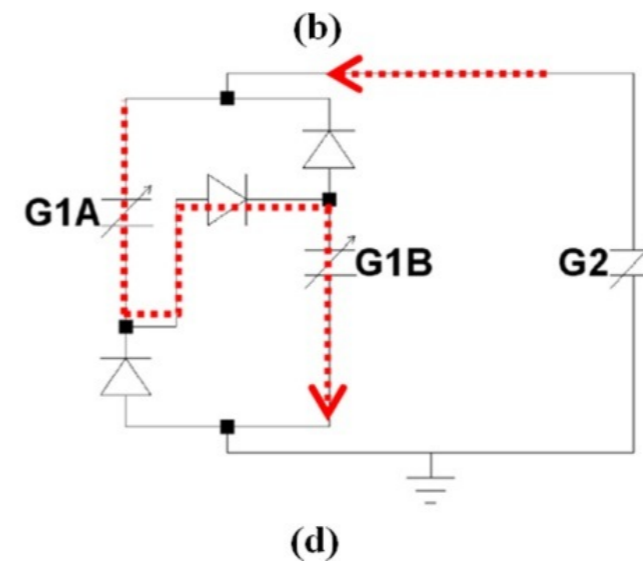
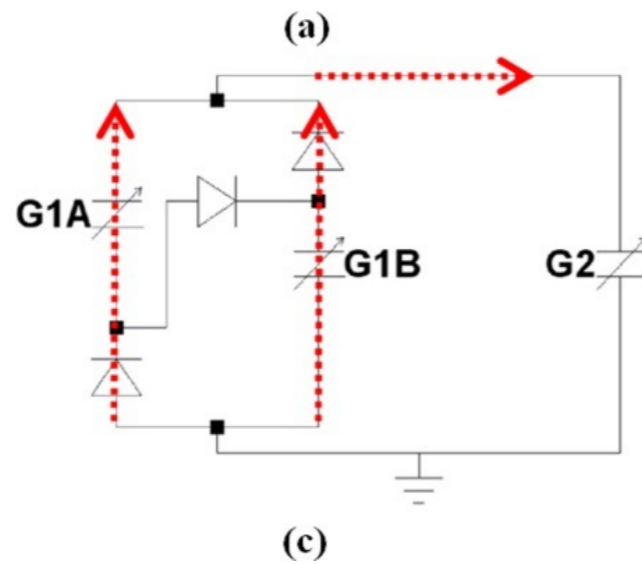
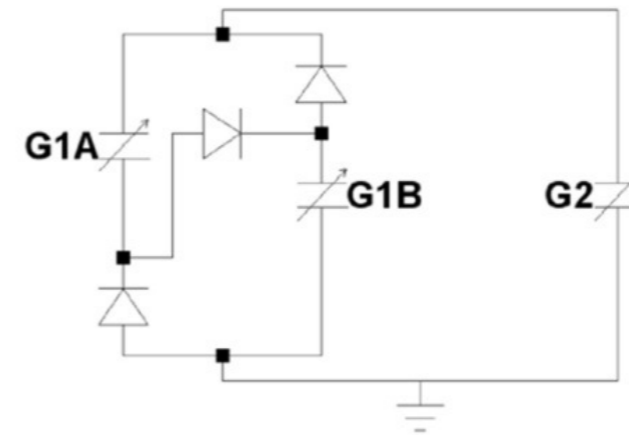
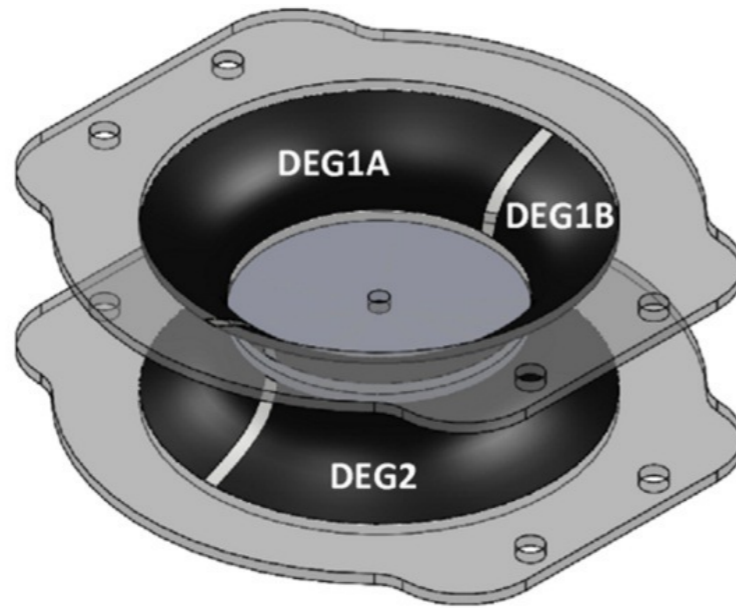
- Amount of Power Required
- Stationary or Mobile Application
- Robustness
- Physical Size
- Level of Human Interaction Required
- Technological Maturity

# Power Generation

# Ambient Backscatter



# Biomechanical



# Biomechanical



# Induction

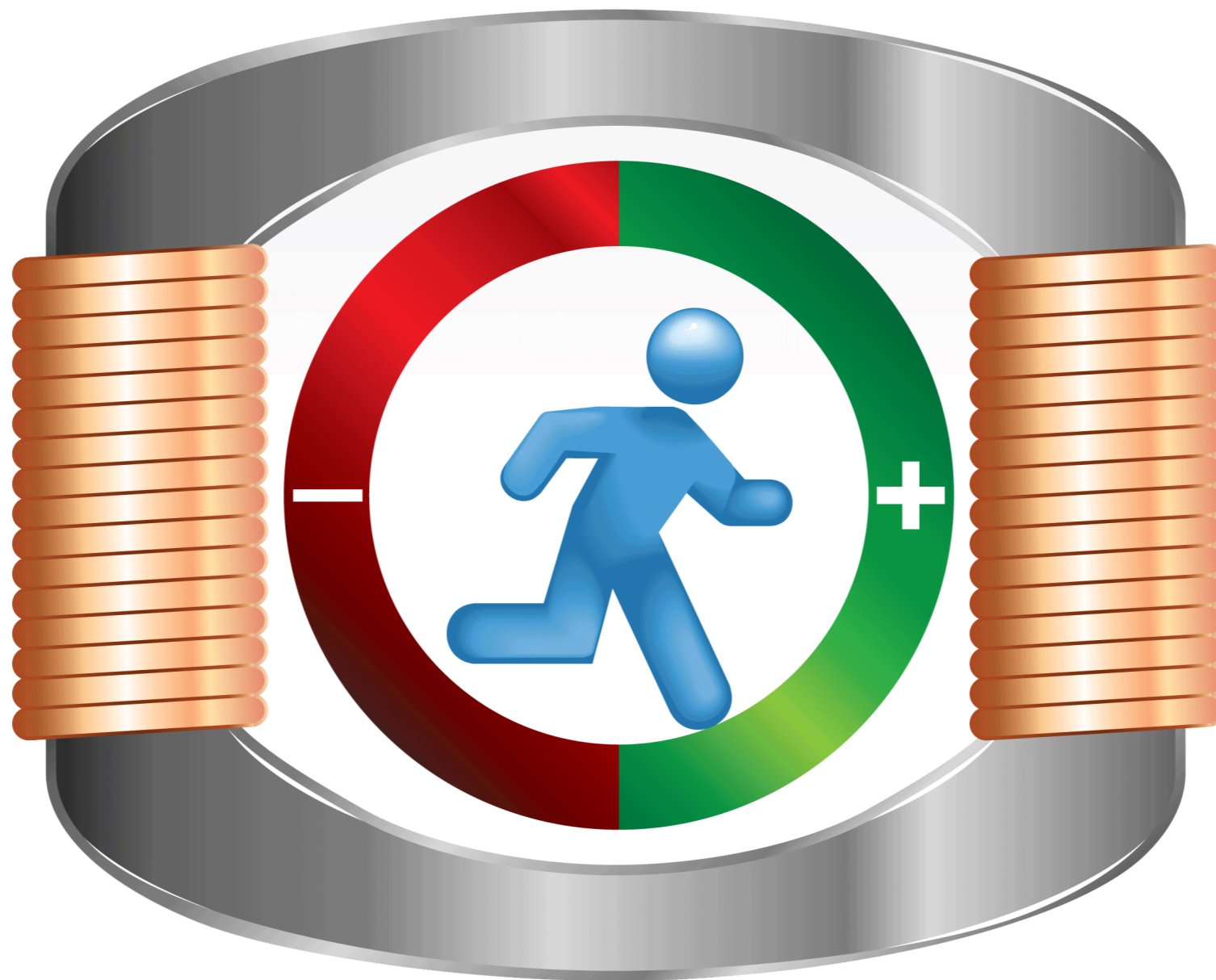


# Induction





# Electro-Magnetic



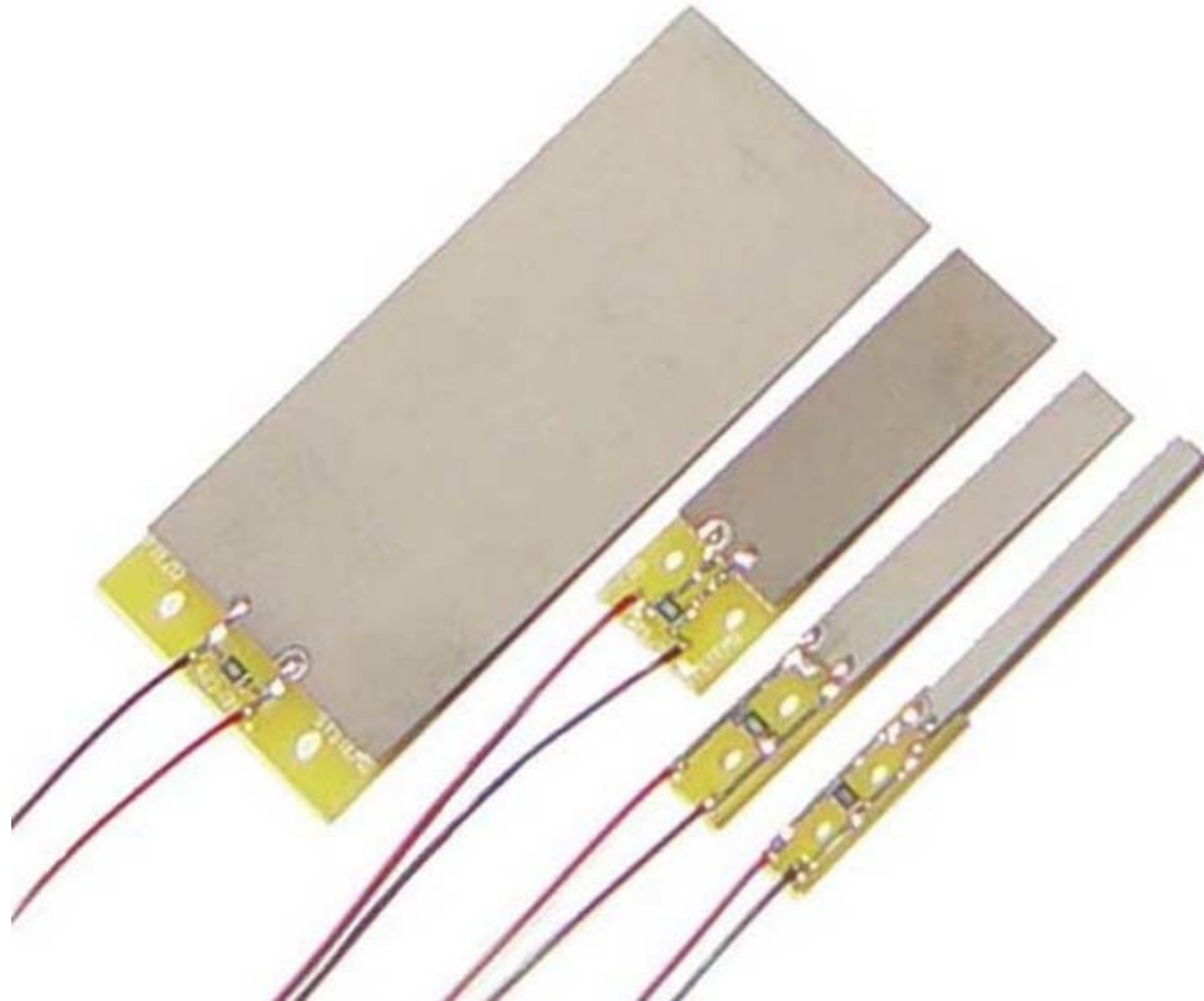
# Electro-Magnetic



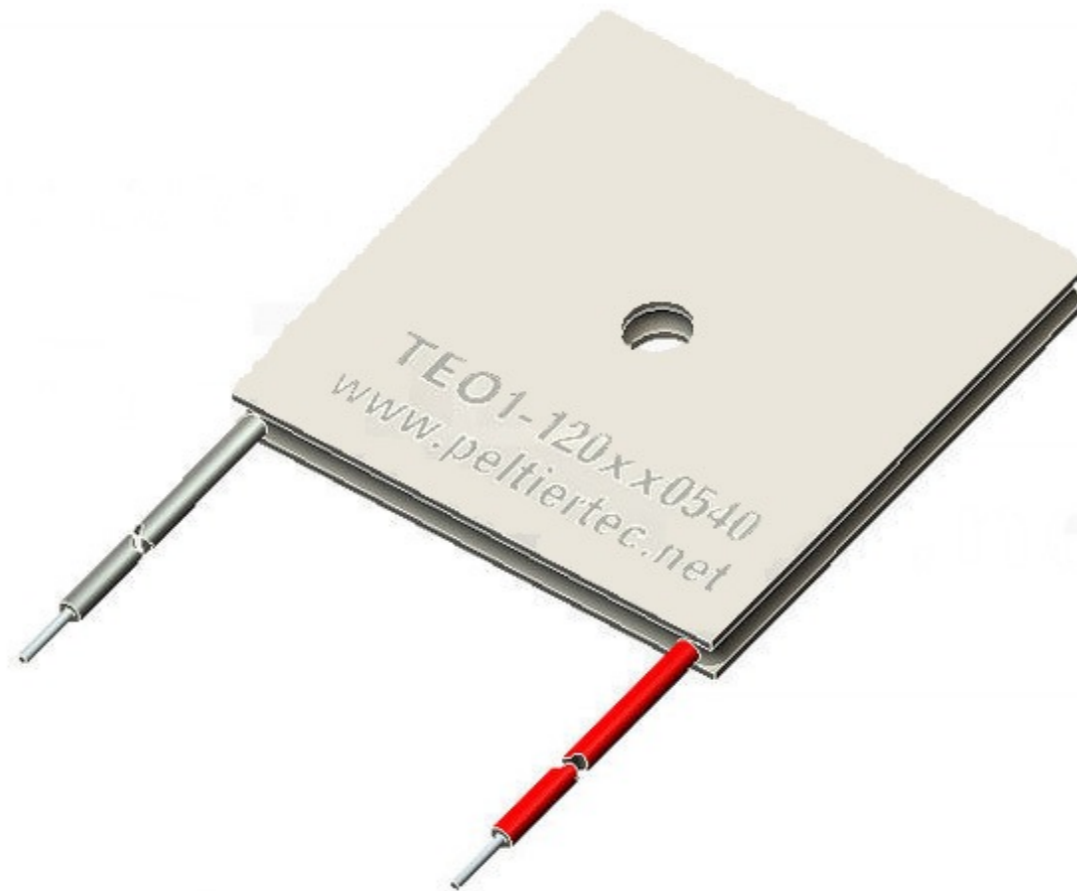
# Micro-Hydro (Electro-Magnetic)



# Piezoelectric



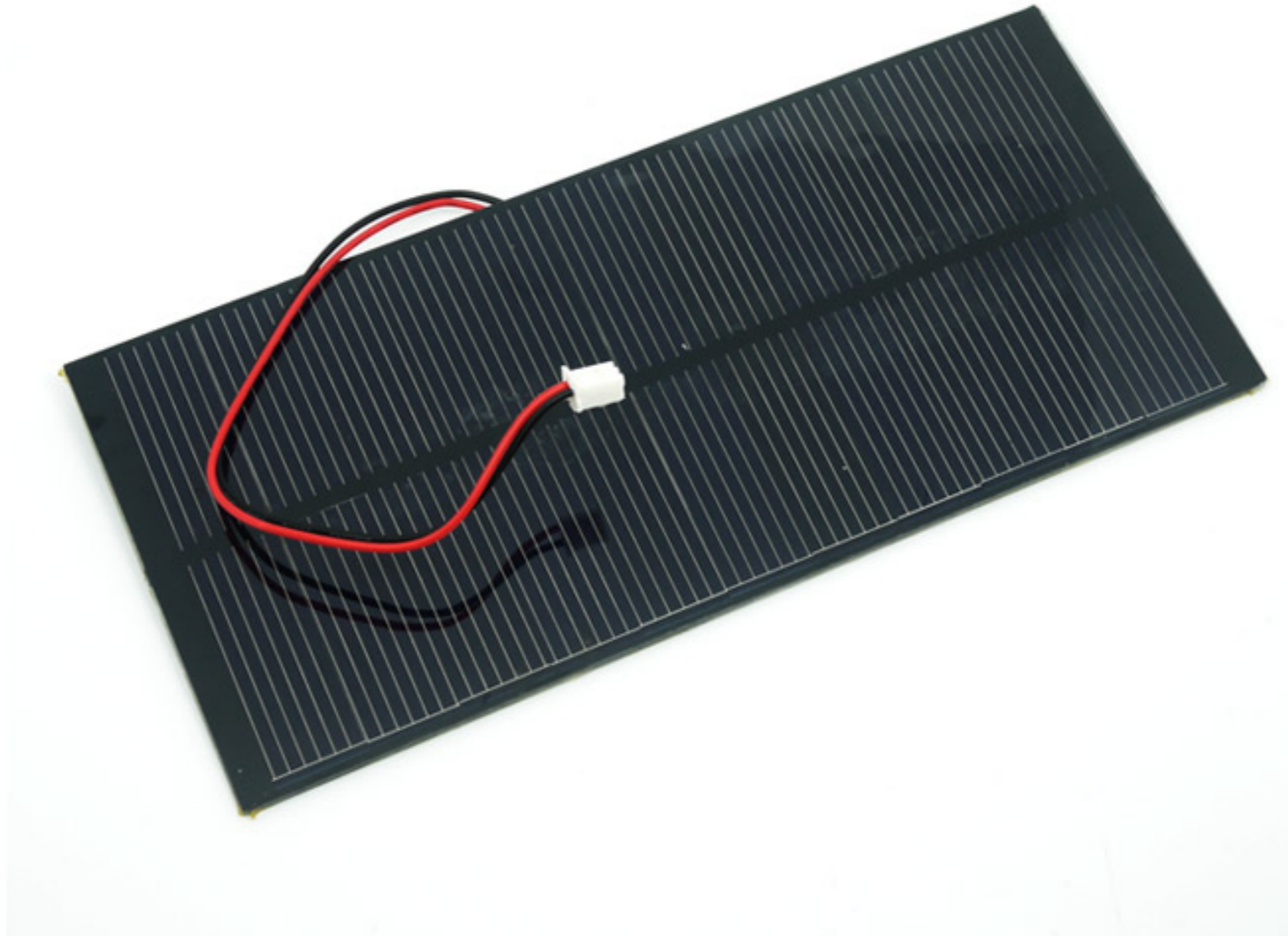
# Thermoelectric



# Thermoelectric



# Solar



# Solar





# Power Storage

# Power Storage: Considerations

- One-Use or Renewable
- Capacity of Storage
- Lifetime / Charge Cycles
- Current Required
- Physical Size
- Environmental Impact

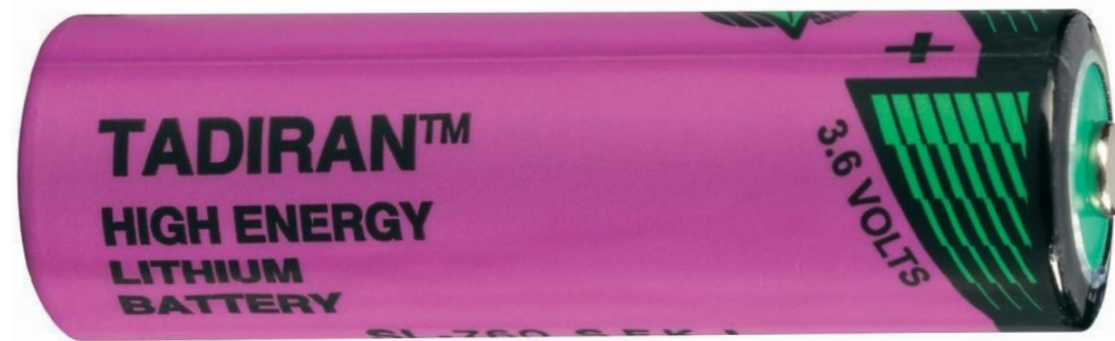
# Alkaline Battery



# Lead Acid Battery



# Lithium Battery



# Lithium Ion Battery



# Super/Ultra Capacitor

