



#### Legend

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**Circuit Breaker:** Power switch.

**Power Meter:** Measures power consumption.

**MCU (Microcontroller Unit):** The "brain" of the system. Computations, communications, and control.

**Transformer:** Steps down voltage.

**Rectifier:** AC to DC voltage converter.

**Regulator:** Steps down voltage.

**RFID (Radio Frequency Identification):** Wireless communication.

**Cell Phone:** Communicates with MCU through RFID.