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| **Abstract:** |  |
| When the inductive load is brought into the industry, it is known that the power factor will drop. The electricity cost will be greater if the power factor is decreased. When power factor drops in our system, the automated capacitor bank is activated, and power factor is restored to a predetermined level. The unique element of our project is that an IoT (Internet of Things) technology was used to complete it. It will be able to monitor and operate the project from any place on the Internet, in addition to monitoring from the project display. As a programming device, it has been utilized an Arduino Uno Microcontroller. The PF may be improved to increase current-carrying capacity, enhance voltage to equipment, minimize power losses, and cut electric costs. Reactive current generators are PF correction capacitors. We contribute to increasing the power factor by helping to balance the nonworking power used by inductive loads. In this article, the power factor of a load is measured using an Arduino Uno microcontroller, which then triggers the appropriate capacitors to correct for reactive power and bring the power factor closer to unity. | |