

A Project Report on

“Procell”

**Submitted in Partial Fulfillment towards the Award of Degree
Bachelor of Technology**

ELECTRONICS AND COMMUNICATION ENGINEERING

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Certificate

This is to certify that the Project entitled “**Procell**” submitted by **Mrugesh Patel (Roll No : 09EC080), Digesh Patel(Roll No : 09EC099) and Rahul Parikh(Roll No : 09EC060)** in the 8th Semester subject “**EC-408 - PROJECT** ”, towards the partial fulfillment of the requirement for the award of the degree of **BACHELOR OF TECHNOLOGY** in the field of “**ELECTRONICS AND COMMUNICATION ENGG**” at Charotar University of Science and Technology (CHARUSAT) is a record of the bona-fide work carried out by him/her under my guidance and supervision. The work submitted, in my opinion, has reached to a level required for being accepted for the examination.

The matters embodied in this project work, to the best of my knowledge, have not been submitted to any other University or institute for the award of any degree or diploma.

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As a partial fulfillment of the requirement

for the degree of

Bachelor of Technology

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ABSTRACT

Mobile communication is an essential part of our day to day life and in chain BTS(Base Transceiver Station) is an essential part of mobile communication. Every mobile phone operation includes the operation of BTS and hence it becomes mandatory to keep an eye on the BTS 24*7 which is very well fulfilled by the device procell.

Procell is a device installed at the BTS station whose functions are:

- 1) To mollify the heat produced due to the operation of various functional units at the BTS by defining the operating temperature range of the air conditioner remotely.
- 2) To turn on the generator when there is a power cut and the battery is also not charged fully so that the functioning at the BTS doesn't alter or even breakdown.
- 3) To keep an eye on the door whether it is open or close so that the cooling done by the AC doesn't get wasted away.
- 4) To note down each and every event by signaling the event occurrence and duration at the main controlling station where a database is created.

Hence, Procell is a device which not only monitors the BTS but also saves the power consumed. If there is a power cut and the battery is fully charged then procell doesn't turn on the generator and the power is provided by the battery. If the battery bank is fully charged and AC is to be switched on then generator should be on which is taken care off by the device.

All this shows the importance of procell whose primary purpose is **ENERGY CONSERVATION**.

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