

---

# UNMANNED PETROL BUNK SYSTEM

## ABSTRACT

In general, a smart card is an integrated circuit card with memory capable of making decisions. A smart card, chip card or integrated circuit card (ICC), is defined as any pocket-sized card with embedded integrated circuits which can process information. In this project, we are using a contact smart card where the information inside the card is communicated with the card reader by inserting card into the card reader. The card reader in this project used is an SR-90 SDK of 1KB memory size.

In this system, all drivers have a smart card called just like a petro card. This card can be recharged by some recharge points. The petrol pump is equipped with a smart card reader/write. At the Petrol Pump, the driver swipes the card and the smart card reader reads the amount in the card and will display it on the LCD. The driver then enters the quantity of petrol that has to be filled using a keypad. The corresponding amount is calculated & deducted from his petro card. The electric pump is then turned ON through the motor according to the entered amount, fills the tank and automatically turns OFF. This motor will operate through relay. Here manual process is avoided by these smart cards.

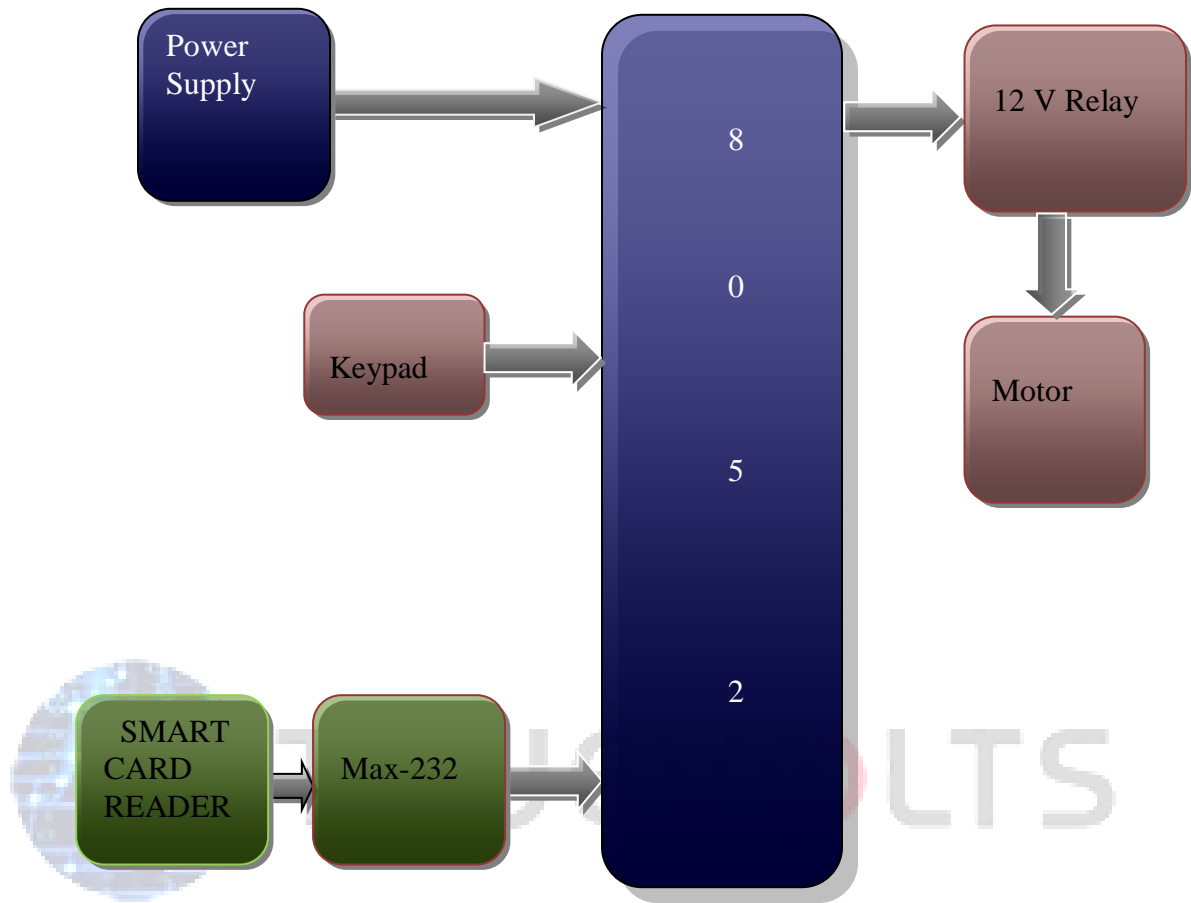
In this project 7805 is a regulator and it avoids noise spikes in power supply. Smart card reader is connected microcontroller through serial port. These smart card readers work under 9600 or 4800 baud rates. 16X2 LCD connected to microcontroller through digital I/O lines.

## APPLICATIONS:

- Petrol bunks

---

### BLOCK DIAGRAM:



### POWER SUPPLY BLOCK DIAGRAM:

