

Gas Leakage monitoring & Alerting system for Industries

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```
#include <LiquidCrystal.h>
LiquidCrystal lcd(7, 6, 5, 4, 3, 2);
#include <SoftwareSerial.h>

SoftwareSerial mySerial(9, 10);

int gasValue = A0; // smoke / gas sensor connected with analog pin A1 of
the arduino / mega.
int data = 0;

void setup()
{
  randomSeed(analogRead(0));
  mySerial.begin(9600); // Setting the baud rate of GSM Module
  Serial.begin(9600); // Setting the baud rate of Serial Monitor (Arduino)
  lcd.begin(16,2);
  pinMode(gasValue, INPUT);
  lcd.print (" Gas Leakage ");
  lcd.setCursor(0,1);
  lcd.print (" Detector Alarm ");
  delay(3000);
  lcd.clear();
}

void loop()
{

  data = analogRead(gasValue);

  Serial.print("Gas Level: ");
  Serial.println(data);
  lcd.print ("Gas Scan is ON");
  lcd.setCursor(0,1);
  lcd.print("Gas Level: ");
```

```

lcd.print(data);
delay(1000);

if ( data > 500) //
{
  SendMessage();
  Serial.print("Gas detect alarm");
  lcd.clear();
  lcd.setCursor(0,0);
  lcd.print("Gas Level Exceed");
  lcd.setCursor(0,1);
  lcd.print("SMS Sent");
  delay(1000);

}
else
{
  Serial.print("Gas Level Low");
  lcd.clear();
  lcd.setCursor(0,0);
  lcd.print("Gas Level Normal");
  delay(1000);
}

lcd.clear();
}

void SendMessage()
{
  Serial.println("I am in send");
  mySerial.println("AT+CMGF=1"); //Sets the GSM Module in Text Mode
  delay(1000); // Delay of 1000 milli seconds or 1 second
  mySerial.println("AT+CMGS=\"+919176427748\\r\""); // Replace x with
mobile number
  delay(1000);
  mySerial.println("Excess Gas Detected. Open Windows");// The SMS text
you want to send
  delay(100);
}

```

```
mySerial.println((char)26);// ASCII code of CTRL+Z  
delay(1000);  
}
```

OUTPUT :



