

```
/******  
Infrared CO2 Sensor0-5000ppm  
*****
```

This example The sensors detect CO2

```
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@version V1.0  
@date 2016-7-6
```

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```
*****/
```

```
int sensorIn = A0;
```

```
void setup() {
```

```
    Serial.begin(9600);
```

```
    // Set the default voltage of the reference voltage
```

```
    analogReference(DEFAULT);
```

```
}
```

```
void loop() {
```

```
    //Read voltage
```

```
    int sensorValue = analogRead(sensorIn);
```

```
    // The analog signal is converted to a voltage
```

```
    float voltage = sensorValue * (5000 / 1024.0);
```

```
    if (voltage == 0)
```

```
    {
```

```
        Serial.println("Fault");
```

```
    }
```

```
    else if (voltage < 400)
```

```
    {
```

```
        Serial.println("preheating");
```

```
    }
```

```
    else
```

```
    {
```

```
        int voltage_diference = voltage - 400;
```

```
        float concentration = voltage_diference * 50.0 / 16.0;
```

```
        // Print Voltage
```

```
        Serial.print("voltage:");
```

```
        Serial.print(voltage);
```

```
        Serial.println("mv");
```

```
        //Print CO2 concentration
        Serial.print(concentration);
Serial.println("ppm");
    }
    delay(100);
}
```