

# Geiger Counter Arduino Sensors Code

This code works for Uno and Mega.

```
#include <Wire.h>
#include <SPI.h>
#include <LiquidCrystal_I2C.h>
#define LOG_PERIOD 15000 //Logging period in milliseconds, recommended value 15000-60000.
#define MAX_PERIOD 60000 //Maximum logging period without modifying this sketch
#define PERIOD 60000.0 // (60 sec) one minute measure period
volatile unsigned long CNT; // variable for counting interrupts from dosimeter
unsigned long counts; //variable for GM Tube events
unsigned long cpm; //variable for CPM
unsigned int multiplier; //variable for calculation CPM in this sketch
unsigned long previousMillis; //variable for time measurement
unsigned long dispPeriod; // variable for measuring time
unsigned long CPM; // variable for measuring CPM
// initialize the library with the numbers of the interface pins

LiquidCrystal_I2C lcd(0x27,16,2); // set the LCD address to 0x27 for a 16 chars and 2
line display
void setup() { // setup
  lcd.init();
  lcd.init();
  lcd.backlight();
  CNT = 0;
  CPM = 0;
  dispPeriod = 0;
  lcd.setCursor(0,0);
  lcd.print(" Geiger Counter ");
  delay(2000);
  cleanDisplay();
  attachInterrupt(0,GetEvent,FALLING); // Event on pin 2
}
void loop() {
  lcd.setCursor(0,0); // print text and CNT on the LCD
  lcd.print("CPM:");
  lcd.setCursor(0,1);
```

Name:

Date:

Class:

```
lcd.print("CNT:");  
lcd.setCursor(5,1);  
lcd.print(CNT);  
if (millis() >=dispPeriod + PERIOD) { // If one minute is over  
cleanDisplay(); // Clear LCD  
// Do something about accumulated CNT events....  
lcd.setCursor(5, 0);  
CPM = CNT;  
lcd.print(CPM); //Display CPM  
CNT = 0;  
dispPeriod = millis();  
}  
}  
void GetEvent(){ // Get Event from Device  
CNT++;  
}  
void cleanDisplay () { // Clear LCD routine  
lcd.clear();  
lcd.setCursor(0,0);  
lcd.setCursor(0,0);  
}
```