**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);**

**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);**

**}**