

```
#include "LDR.hpp"

constexpr const char* LDRSensor::TAG;

LDRSensor::LDRSensor(adc1_channel_t channel, gpio_num_t pin, uint32_t
read_interval_ms):
    adc_channel_(channel),
    gpio_pin_(pin),
    task_handle_(nullptr),
    read_interval_ms_(read_interval_ms),
    running_(false)
{
    adc1_config_width(ADC_WIDTH_BIT_12); // Resolutie 12 bits
    adc1_config_channel_atten(adc_channel_, ADC_ATTEN_DB_11);
}

void LDRSensor::start() {
    if (!running_) {
        running_ = true;
        xTaskCreatePinnedToCore(taskWrapper, "ldr_task", 2048, this, 5,
        &task_handle_, tskNO_AFFINITY);
    }
}

void LDRSensor::run() {
    while(running_)
    {
        int val = adc1_get_raw(adc_channel_);

        ESP_LOGI(TAG, "LDR waarde: %d", val);

        vTaskDelay(read_interval_ms_ / portTICK_PERIOD_MS);
    }
}

void LDRSensor::taskWrapper(void* pvParameters) {
    LDRSensor* sensor = static_cast<LDRSensor*>(pvParameters);
    sensor->run();
}
```