

# LIDAR-Lite Laser Rangefinder



**Produktkode:** 337

**Tilgjengelighet:** Opp til 1 mnd leveringstid

**Send SMS etter pris:** 91166668

## Short Description

LIDAR-Lite Laser Rangefinder (PulsedLight) V1 måler avstander opp til 40 meter.

## Beskrivelse

[Manual](#)

[Arduino skisse](#)

## Description

- Fast, accurate and powerful laser based measurement solution
- Compact 51mm x 30mm x 39mm module with 40m measuring range
- Great for drones, robotics and other demanding applications
- Transmit Power (laser): 1.5Watts peak @ 3amps drive
- Acquisition time: < 0.02 sec

The **LIDAR-Lite Laser Rangefinder** by PulsedLight is an essential, powerful, scalable and economical laser based measurement solution supporting a wide variety of applications (ex. drones, general robotics, industrial sensing and more). Measures distance, velocity and signal strength of cooperative and non cooperative targets at distances from zero to more than 40 meters. Offering the highest performance available in a single beam ranging sensor in its class.

## Specifications

### Performance

- Range: 0-20m LED emitter
- Range: 0-60m Laser emitter
- Accuracy: +/- 0.025m
- Power: 5VDC, <100ma
- Rep rate: 1-100Hz
- Interface: I2C or PWM

### Configuration

- Laser/PIN diode 14mm optics (class 1 laser product)

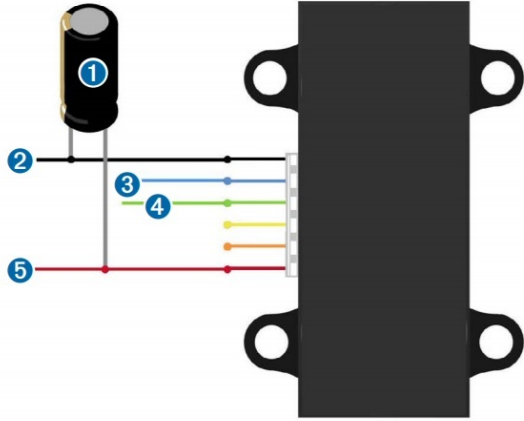
### Laser sensor PCB

- NEP (PIN detector): 12nW rms, 1.5pF detector capacitance, 1mm virtual detector size
- Min detectable signal: 1nW - 256 integrated bursts (maximum integration time)
- Transmit power (laser): 1.5Watts peak 14mm @ 3amps drive, 75um single stripe laser junction
- Transmit power (LED): 200mW within +/- 3 degree beam @ 1amp

### Info

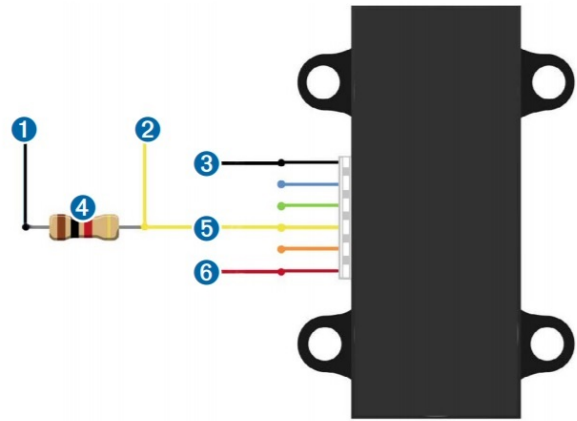
<https://learn.sparkfun.com/tutorials/lidar-lite-v3-hookup-guide/all>

### Standard I2C Wiring

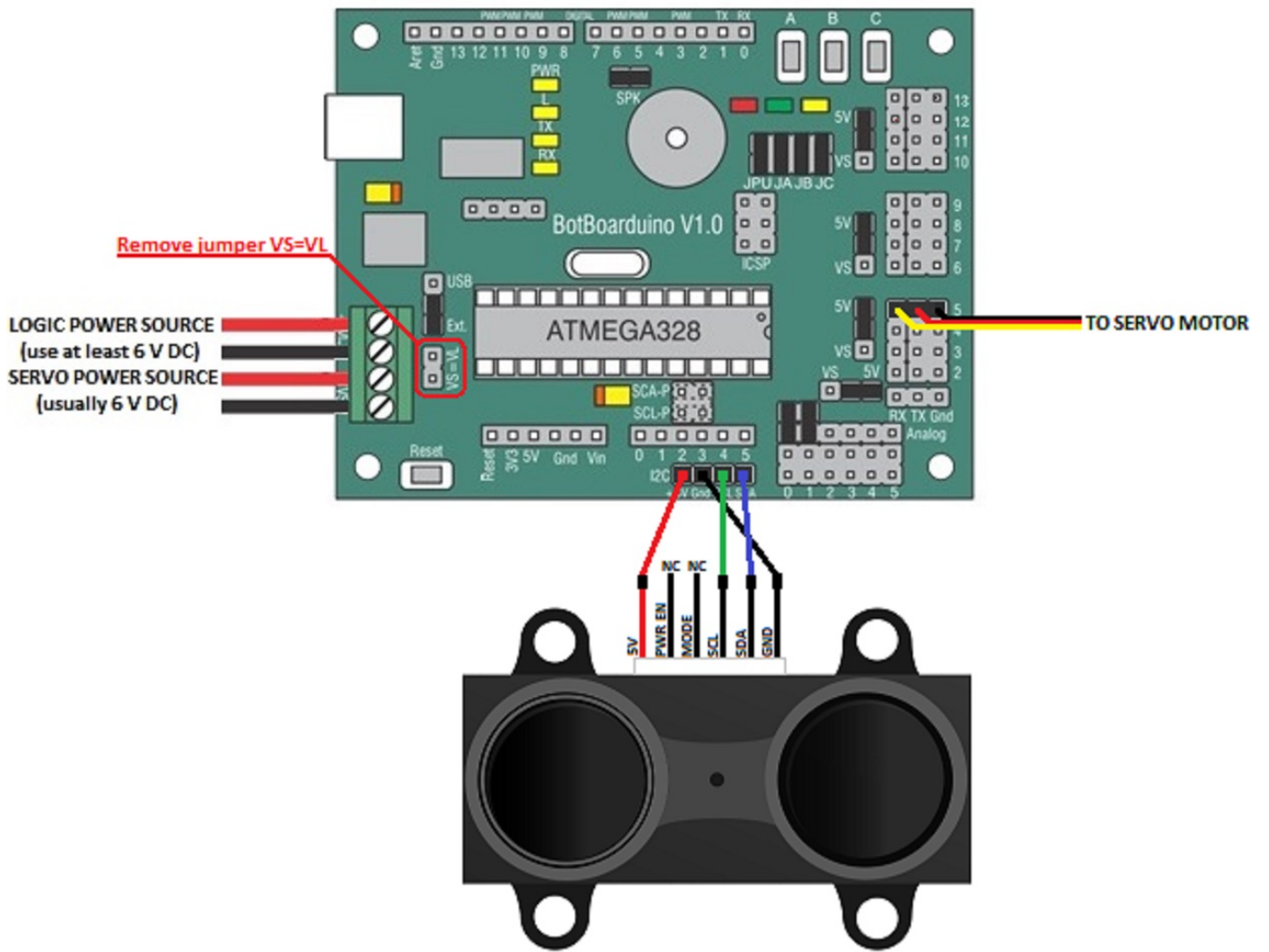


| Item | Description                  | Notes  |
|------|------------------------------|--|
| 1    | 680µF electrolytic capacitor | You must observe the correct polarity when installing the capacitor.           |
| 2    | Power ground (-) connection  | Black wire   |
| 3    | I2C SDA connection           | Blue wire  |
| 4    | I2C SCA connection           | Green wire   |
| 5    | 5 Vdc power (+) connection   | Red wire<br>The sensor operates at 4.75 through 5.5 Vdc, with a max. of 6 Vdc. |

### PWM Wiring



| Item | Description                        | Notes   |
|------|------------------------------------|---|
| 1    | Trigger pin on microcontroller     | Connect the other side of the resistor to the trigger pin on your microcontroller.  |
| 2    | Monitor pin on microcontroller     | Connect one side of the resistor to the mode-control connection on the device, and to a monitoring pin on your microcontroller. |
| 3    | Power ground (-) connection        | Black Wire  |
| 4    | <del>470</del> resistor<br>470 Ohm |   |
| 5    | Mode-control connection            | Yellow wire   |
| 6    | 5 Vdc power (+) connection         | Red wire<br>The sensor operates at 4.75 through 5.5 Vdc, with a max. of 6 Vdc.  |



## Product Gallery



