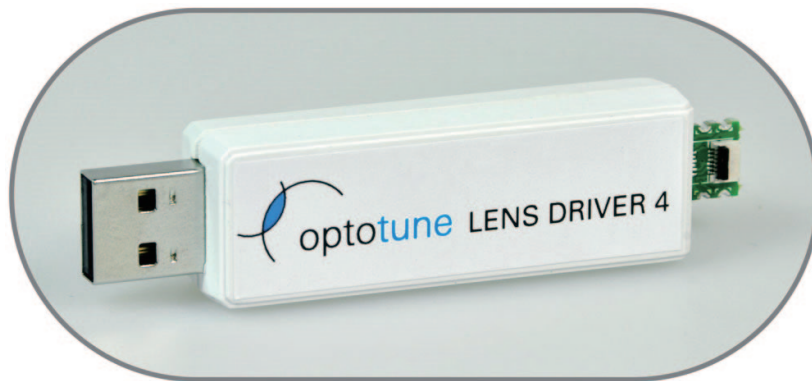


# Electrical Lens Driver 4



The Electrical Lens Driver 4 offers a simple yet precise way to control Optotune's electrical lenses, in particular the EL-6-18 and EL-10-30 series. It can be used as a standalone solution or integrated into OEM designs.

Main features:

- Current control range up to -290 to +290 mA with 12 bit precision
- Drive frequencies from 0.2 to 1000 Hz (rectangular, triangular or sinusoidal)
- I2C sensor read-out e.g. for temperature compensation
- USB powered
- Driver software in Windows 7
- Available with or without housing

## Relevant on-board components

- Current source with 12 bit precision (Analog Devices ADN8810)
- Microcontroller 8-bit, 16 MHz with 32 KB Flash (Atmel ATmega32U4)
- 6-way FPC connector (Molex 503480-0600)

### Mechanical specifications

Dimensions (L x W x H)	77 x 19 x 13 mm
Weight	11 g
Interface to PC	USB Type A
Interface to lens	0.5mm pitch 6 way FPC connector

### Electrical specifications

Drive current range for EL-6-18	-290 to +290 mA
Drive current range for EL-10-30	-200 to +200 mA
Precision	12 bit
USB input voltage	5 V
Power consumption	50 – 1100 mW
Maximum output update frequency	>100 kHz

### Thermal specifications

Operating temperature	-20 to +65 °C
Storage temperature	-40 to +85 °C

## Maximum current

The maximum current of the driver is limited to either 290mA or 2.8V divided by the resistance applied.

