## **ELECTRONICS**

## **Laser Diode Driver LD-SMART**



The Laser Diode Driver LD-SMART is designed to actuate laser diodes or diode pumped solid state lasers. New feature of LD-SMART is the adaptive temperature control, whereas the temperature is set by the current of the diode. This device contains up to three temperature controllers. There are one bipolar PID temperature controller for laser diode and two unipolar PID temperature controllers for laser crystal or SHG.

All controllers configurable to two bipolar PID temp. controllers

It can be used with integrated laser diode or stand alone

- Communication possible through USB, Bluetooth, RS232 (3,3V level)
- Open protocol description, easy implementation into custom designs
- Compatible with our Impex HighTech laser diode driver software
- TEC current up to 10 A and TEC power up to 20 W.



Max. Laser Diode Current

Laser Diode Compliance Voltage

Operational mode

- Pulse triggering mode
- Range of pulse width and period
- Supply voltage range
- Setting accuracy

10.0 A

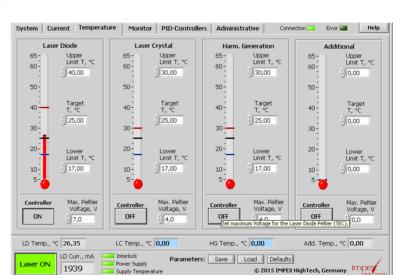
8.0 V

CW, pulsed, external mod. internal & external (TTL)

10 µs to 0.6 s

12V DC (9-14V DC)

±0.05° C



A user friendly software to control the LD-SMART by an external PC or tablet is provided. In addition it can be used in laboratory environments or for OEM applications. The mode of laser diode operation can be changed between continuous wave, pulsed mode or external analogue modulation.

The ELM Series laser system is an OEM versions of an Impex HighTech GmbH diode-pumped solid state laser. As such, it is intended only for integration into other equipment. The ELM Series laser does not comply with Center for Devices and Radiological Health (CORH) standards. The customer is responsible for CORH certification of any system that incorporates an ELM Series laser.







