

## 808nm high power benchtop single mode pump source 200mW



### ● Product Description

Idealphotonics' modular laser control is based on an advanced microprocessor control system, combined with high-precision ATC and ACC (APC) control circuits to achieve high and stable output of the laser, while ensuring that the light source is quick and intuitive to operate. We can also provide corresponding communication interfaces and control software according to user requirements to achieve computer control. This light source uses a one-key recovery function (Run/Stop button), which can



effectively help customers return to the previous working state. This is a highly integrated modular system light source, which uses PC-side software intelligent control. Customers can set the required working temperature and current according to their needs. It is very suitable for experimental scientific research and production testing. In addition, we need to modulate the laser for some application fields. We have connected two modulation ports, one for high frequency and one for low frequency, to better meet customers' needs for multiple uses of one machine.

## ● Product features

Support one-key restore function (no need to restart and preheat) 、  
Software remote control, intelligent control 、 Stable output power,  
continuously adjustable、 Compact structure、 High-precision ACC and ATC  
control circuit、 Built-in high and low modulation bandwidth BNC interface

## ● Part Number

MP-LDC-250-M-808

## ● Application area

Laser sensor、 Pump light source、 Test and measurement



## ● Core parameters

| Center Wavelength | Output Power |
|-------------------|--------------|
| 808nm             | 200mW        |

## ● General Parameters

### Parameters

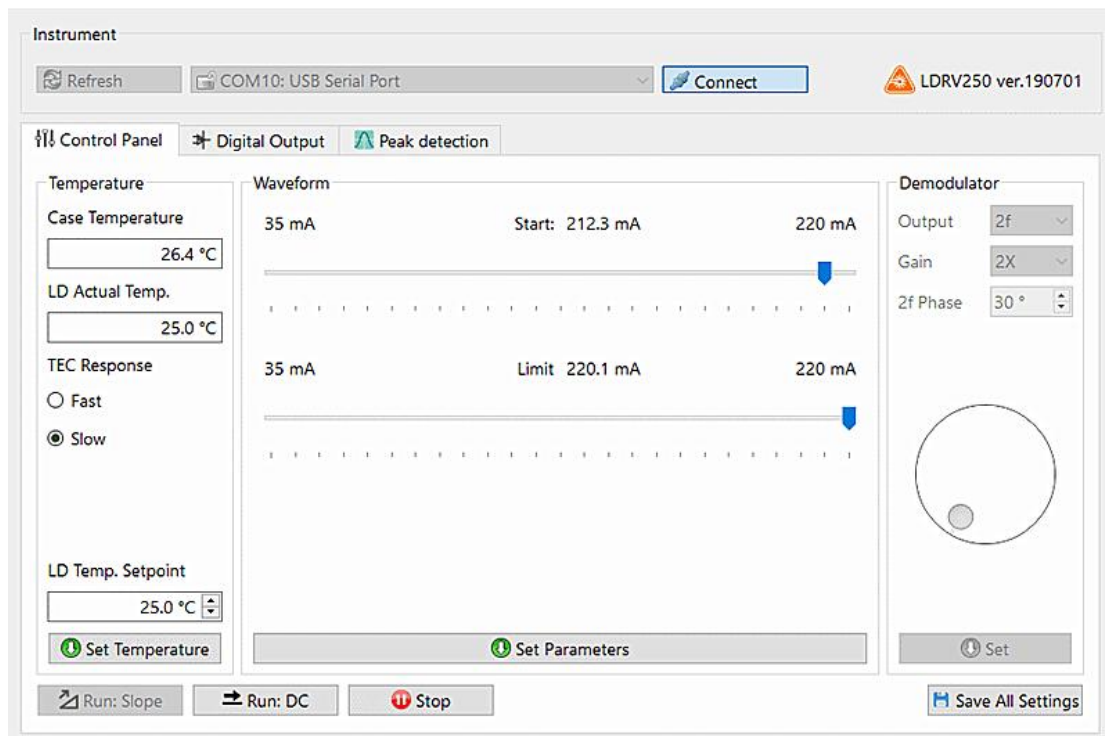
| Characteristic               | Min. | Max.              | Unit | Notes             |
|------------------------------|------|-------------------|------|-------------------|
| Power supply voltage         | 100  | 230               | VAC  | Mains electricity |
| Power                        | 5    | 20                | W    |                   |
| Laser drive current          | 0    | 128<br>266<br>590 | mA   | Jumper optional   |
| Laser drive voltage          | 0    | 3.1               | V    | @250mA            |
| Response frequency           | 0    | 15                | MHz  | -3db              |
| Temperature control range    | 0    | 5                 | °C   |                   |
| TEC output current           | -1.5 | 1.5               | A    |                   |
| TEC output voltage           | -4.4 | +4.4              | V    |                   |
| Analog input(low frequency)  | -2.5 | 2.5               | V    |                   |
| Analog input(high frequency) | -2.5 | 2.5               | V    |                   |
| PD monitoring range          | 0    | 2                 | mA   |                   |



## Laser parameter

| Parameter         | Unit | Value   |
|-------------------|------|---------|
| Laser wavelength  | nm   | 808 ± 1 |
| power             | mW   | 200     |
| Spectral width    | nm   | 0.5     |
| Operating current | mA   | 400     |
| Threshold current | mA   | 86      |
| Operating voltage | v    | 1.22    |
| Thermistor        | Ω    | 10000   |

## Control software interface



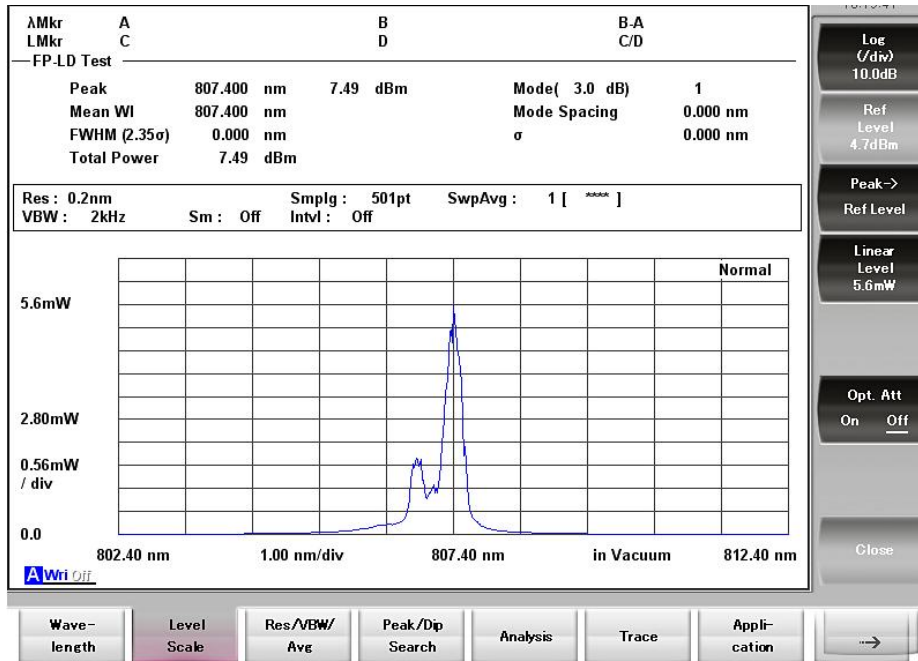
The screenshot shows the 'Instrument' control software interface for an LDRV250 laser. The interface includes a top status bar with a 'Refresh' button, a dropdown menu for the serial port (COM10: USB Serial Port), a 'Connect' button, and the instrument model 'LDRV250 ver.190701'. Below this is a 'Control Panel' with three tabs: 'Control Panel' (selected), 'Digital Output', and 'Peak detection'. The 'Control Panel' tab is divided into three main sections:

- Temperature:** Displays 'Case Temperature' at 26.4 °C and 'LD Actual Temp.' at 25.0 °C. It includes a 'TEC Response' selector with 'Fast' and 'Slow' options (currently 'Slow' is selected). There is also an 'LD Temp. Setpoint' set to 25.0 °C and a 'Set Temperature' button.
- Waveform:** Shows two current waveforms. The top one is labeled 'Start: 212.3 mA' and ranges from 35 mA to 220 mA. The bottom one is labeled 'Limit 220.1 mA' and also ranges from 35 mA to 220 mA. Both waveforms have a 'Set Parameters' button below them.
- Demodulator:** Features a dropdown for 'Output' (set to 2f), a dropdown for 'Gain' (set to 2X), and a dropdown for '2f Phase' (set to 30 °). It includes a circular phase adjustment knob and a 'Set' button.

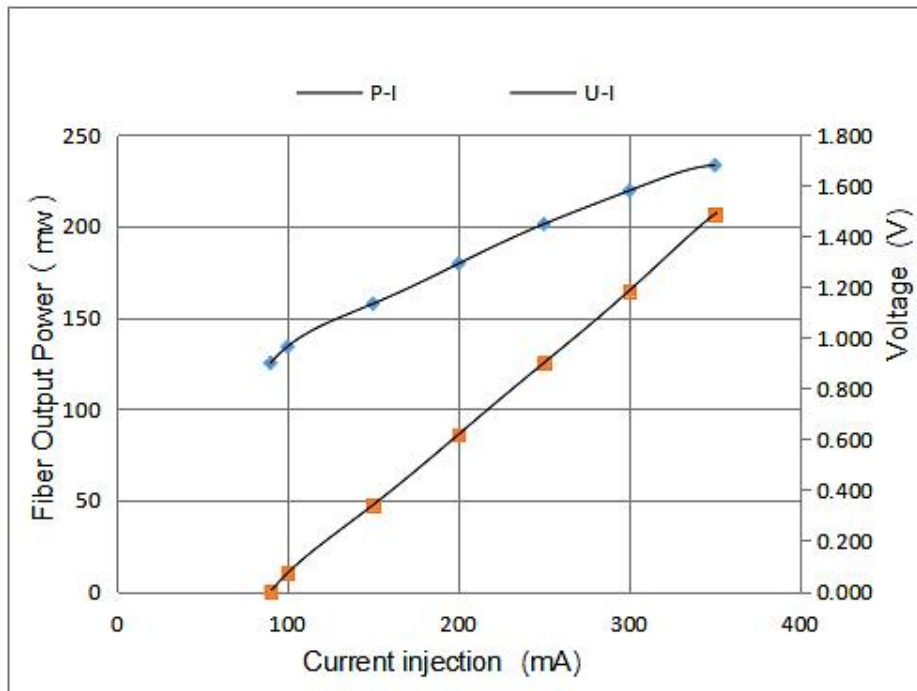
At the bottom of the interface, there are three main control buttons: 'Run: Slope', 'Run: DC', and 'Stop'. A 'Save All Settings' button is located in the bottom right corner.



## Spectrum



## Power curve





## Ordering information

**Name:** 808nm high power benchtop single mode pump source

**PN#:** MP-LDC-250-M-808

**Operating wavelength:** 808:808nm