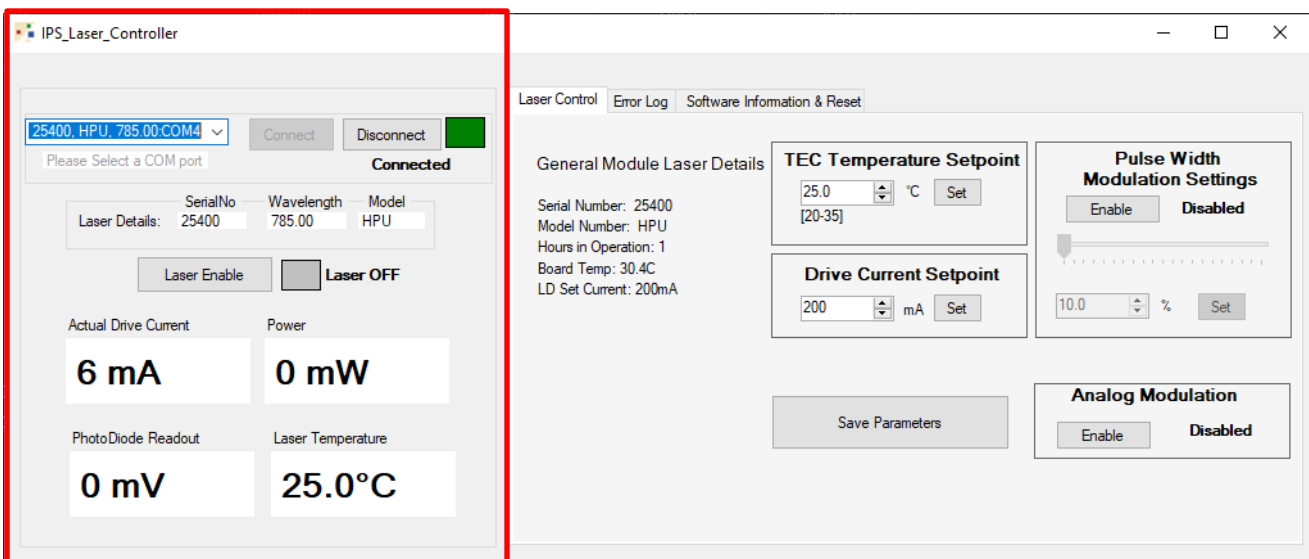# Single Wavelength GUI

USER GUIDE

Connecting the Laser:

    I.   To Connect the laser, plug the USB A into the top port on back panel and plug the other end of the cable into your device. Note: The cable going from laser to computer needs to be plugged into the top port or you will get an error code.

    II.   The bottom USB A port can be used to connect the laser to a spectrometer or other device.

Selecting the Laser

    I.   Select a COM port in the "Select a Laser" drop down. Once you have selected a laser click Connect. The indicator to the right will turn GREEN when the laser is connected.

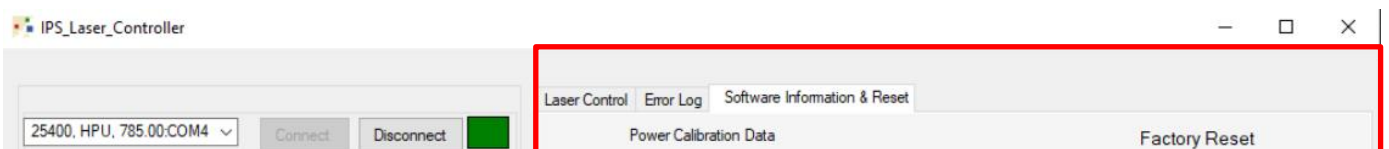   II.   The laser details will auto fill in with the Serial Number, Wavelength, & Model.

Turning the Laser on

    I.   Click the button labeled "Laser Enable" The indicator to the right will turn GREEN when the laser is connected.
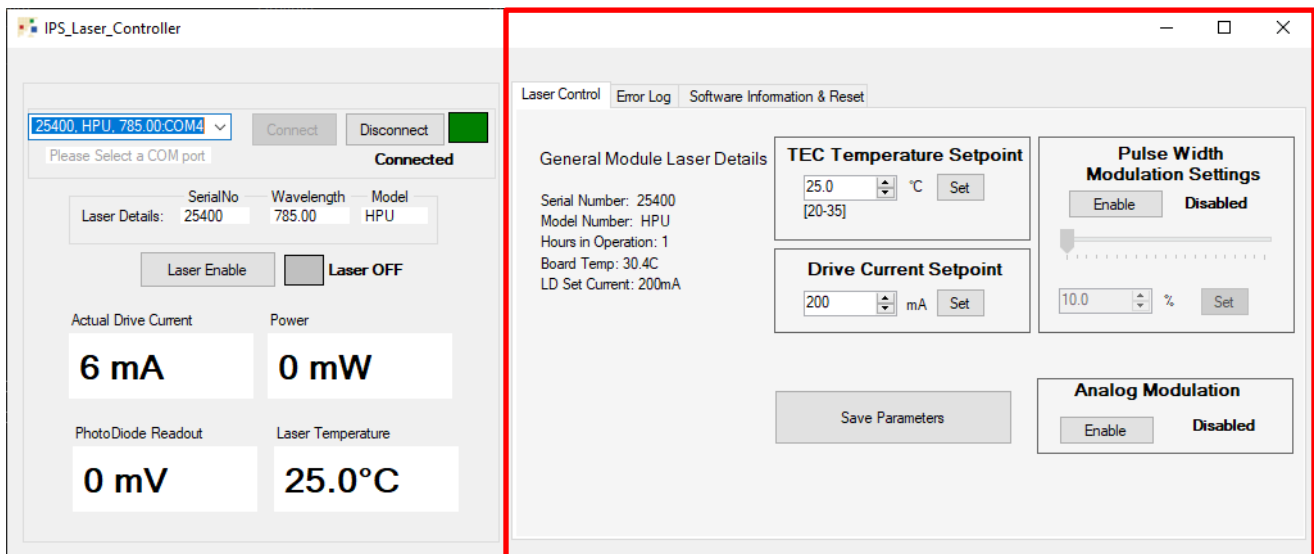
Controlling the Laser:

On the right side of the GUI you will see three different tabs: Laser Control, Error Log, & Software Information & Reset.
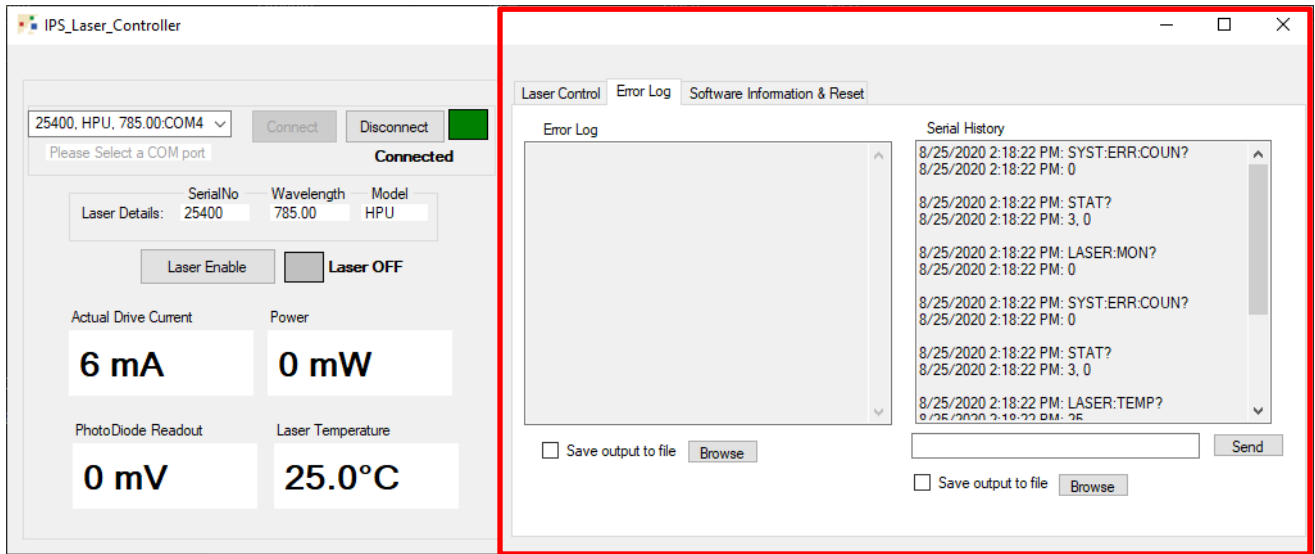
Setting the Laser Parameters:

I.   Under tab "Laser Control" you will be able to set the TEC Temperature Setpoint, Pulse Width Modulation, Drive Current & Analog Modulation.

II.   NOTE: When Enabling PWM you will need to switch the toggle on the physical laser.

III.   To control the laser using Analog input(0-1v) connect the analog input to the laser and enable Analog Modulation.

IV.   Once you click "Save Parameters" the parameters will be permanently saved until a reset is done.

Error Log & History:

I.   Under tab "Error Log" you will find the Error Log and Laser History.

II.   You can Save both the Error Log and the Serial History by checking the box next to "save output to file" then clicking Browse and choosing your file path. '

III.   To send custom commands via the serial port enter command in field below "Serial History" and hit SEND.

IPS_Laser_Controller

25400, HPU, 785.00:COM4 ▾ | Connect | Disconnect | 🟩

Please Select a COM port — **Connected**

	SerialNo	Wavelength	Model
Laser Details:	25400	785.00	HPU

Laser Enable | **Laser OFF**

Actual Drive Current
6 mA

Power
0 mW

PhotoDiode Readout
0 mV

Laser Temperature
25.0°C

| Laser Control | Error Log | Software Information & Reset |

Error Log

Serial History
```
8/25/2020 2:18:22 PM: SYST:ERR:COUN?
8/25/2020 2:18:22 PM: 0

8/25/2020 2:18:22 PM: STAT?
8/25/2020 2:18:22 PM: 3, 0

8/25/2020 2:18:22 PM: LASER:MON?
8/25/2020 2:18:22 PM: 0

8/25/2020 2:18:22 PM: SYST:ERR:COUN?
8/25/2020 2:18:22 PM: 0

8/25/2020 2:18:22 PM: STAT?
8/25/2020 2:18:22 PM: 3, 0

8/25/2020 2:18:22 PM: LASER:TEMP?
8/25/2020 2:18:22 PM: 25
```

☐ Save output to file | Browse

| Send |

☐ Save output to file | Browse

Software Information & Reset:

    I.   Under the tab "Software Information & Reset" you will see the Power Calibration Data. (This data will not be available for the D-Type Modules).

   II.   To reset to factory settings, click the RED reset button.