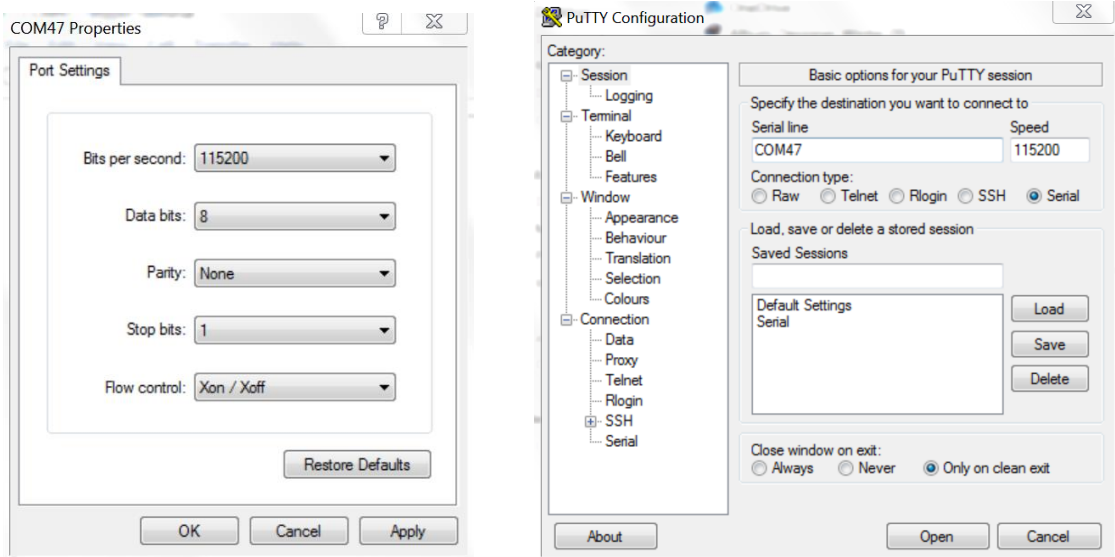# Laser Driver Board (PL530K) Controlled over Serial Port

The laser driver board (PL530K) is equipped with ESP8266 microcontroller Kit8 can be controlled through computer serial port in the following steps:

1. Connect the + 5 VDC power supply to the power jack and turn it on.
2. Connect a computer serial port to the Kit8 serial port via a USB (A Male to Micro B Male) cable.
3. Check the computer Device Manager to find the serial port number for the driver board COMxx. If the COMxx port is not found, install the Arduino driver from the link:

   https://docs.arduino.cc/tutorials/generic/DriverInstallation

4. After the driver installed, locate the COM port number, such as COM47, from the Computer Device Manager.
5. Start computer Hyper Terminal by using either hypertrm.exe or putty.exe to connect to the device. The serial port of the hypertrm.exe or putty.exe is set up as follows

6. Once connected, the hyper terminal window will pop up and display all parameters on the screen page shown below for hypertrm.exe or putty.exe

7. Laser control operates by entering commands on the window page:

A). To enable the laser, type "e" and Enter.

B). To disable the laser, type "d" and Enter.

C). To change the Laser current, type "l" (L in lower case) and Enter, then a number (from 0 to 4000) and Enter.

D). To change the Heater current, type 'h' and Enter, then a number (from 0 to 2000) and Enter.

Note: Entering any number is safe and it does not exceed the maximum current allowed by the laser and heater.