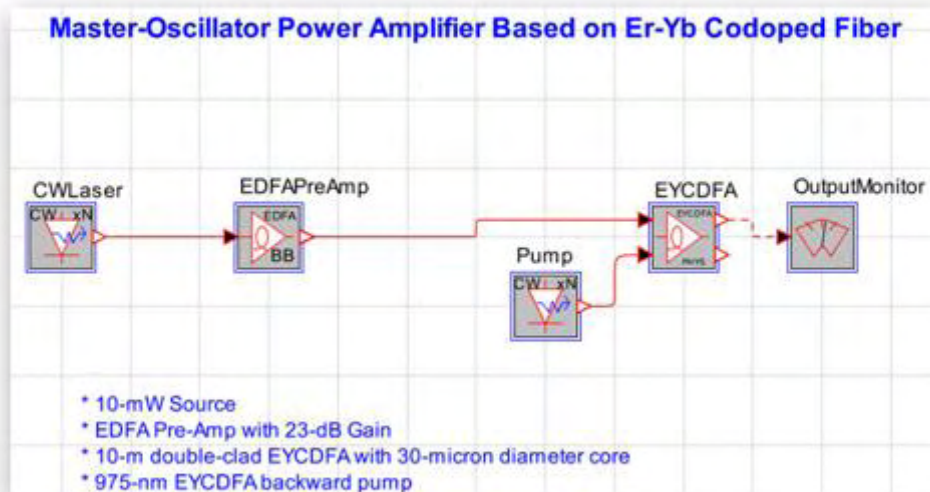


## Er-Yb-Based Master-Oscillator Power Amplifier (MOPA)

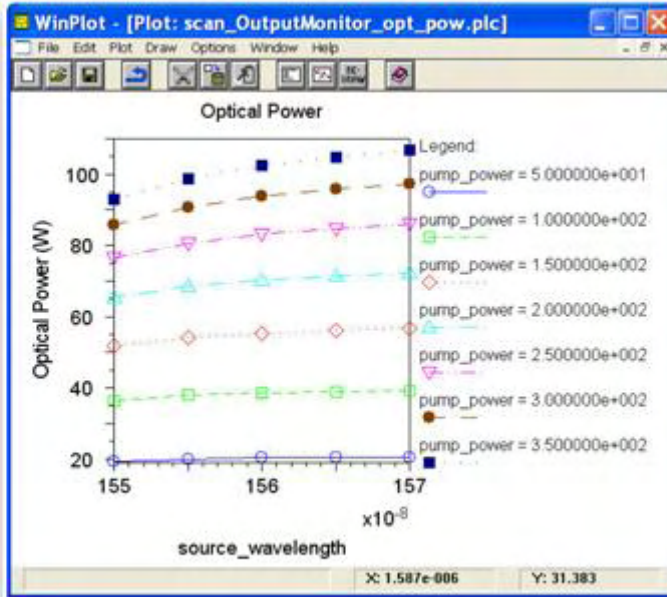
Tool Used: OptSim

This example demonstrates a master-oscillator power amplifier using an EDFA and an Er-Yb co-doped fiber amplifier (EYCDFA).

Figure below depicts the topology used:



The figure below depicts the MOPA output versus source wavelength for different pump-power values. As can be seen, outputs on the order of 100 W can be achieved for sufficiently high pump powers. The output power can be further increased by raising the pump power, though roll-over does eventually occur.



Next, we will plot the MOPA output power versus pump power at a source wavelength of 1550 nm. The figure below shows the steady increase of MOPA output power as we increase the pump power, with the onset of roll-over manifest at higher pump powers.

