



DEVICE

Nanosecond Pulsed Laser - Phoenix Series

OVERVIEW

The Optilab NPL-P-1550 is a variable pulsed DFB laser source, a building block ideal for MOPA, LIDAR, OTDR laser systems development and applications. This fully integrated device contains a Distributed Feedback (DFB) laser and variable nanosecond pulse generation circuits, all within the touchscreen housing. The NPL-P-1550 provides 20 mW optical peak power in 1550 nm wavelength region, with a programmable pulse width from 10 ns to 1000 ns, and a selectable pulse repetition rate from 100 Hz to 1 MHz. The optical pulse generation can alternatively be controlled via an external electrical trigger. In a compact design, NPL-P-1550 is applicable for OEM integration or as a stand alone pulsed laser source. Contact Optilab Sales for more information.

FEATURES

- Standard wavelength: 1550 ± 10nm
- No external pulse generator required!
 Light Weight: < 5.5 lbs. (2.5kgs)
- Pulse width: 10 ns to 1000 ns, selectable
- Repetition rate: 100 Hz to 1 MHz, selectable
- 20 mW peak power
- 7" LCD touchscreen
- Wireless Control (Optional)

SOFTWARE

- Touchscreen Control No PC Required
- Built-in Intuitive GUI
- Remote Control via USB or Z-Link

APPLICATIONS

- Master Oscillator (MO) for MOPA
- Pulsed light source for LIDAR
- Laser source for OTDR

- Pulsed based optical instrumentation
- Raman distributed sensing





SPECIFICATIONS

OPTICAL

Center Wavelength	1550 ± 10 nm		
Optional Wavelength	1310 nm, 1570 nm to 1600 nm		
Laser type	DFB, FP available		
Laser Linewidth	< 3 MHz		
Optical Pulse Width	10 ns to 1000 ns (selectable)		
Pulse Repetition Rate	100 Hz to 1 MHz (selectable)		
Pulse Contrast Ratio	50 dB typ.		
Peak Optical Power	20 mW typ.		
Input Trigger Level TTL	> 3.5 V		
Trigger Connector	SMA female 50 Ω		
Fiber Type	SMF-28		
Optical Connector	FC/APC, others available		

MECHANICAL

Operating Temperature	0 °C to +40 °C		
Storage Temperature	-20 °C to +70 °C		
Humidity	10% to 90 %		
Cooling	Passive		
Dimensions (LxWxH)	290mm x 45 mm x 170 mm		
Weight	< 2.5 kg		
Housing	Injection Molded Aluminum		

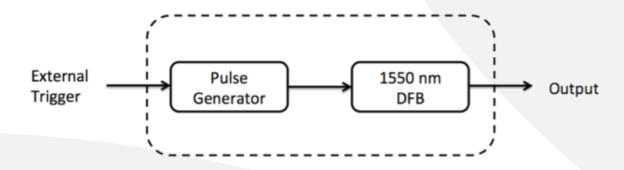
ELECTRICAL

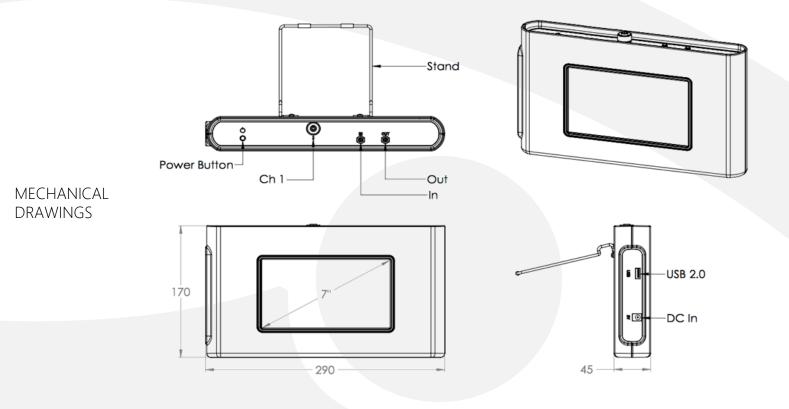
Power Supply	+5V DC External Power Adapter	
Backup Battery	Lithium Ion	
Display	7" LCD Touchscreen	
Battery Life	3 hours Operation	
Software	GUI Interface	





FUNCTION DIAGRAM









SCREENSHOT

	DFB Setting	Back
H 1 11	1550	
Wavelength:	1550 nm	
Current:	500 mA	
TEC Point:	600	

