

NPL-P-1550



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!
- Pulse width: 10 ns to 1000 ns, selectable
- Repetition rate: 100 Hz to 1 MHz, selectable
- 20 mW peak power
- Light Weight: < 5.5 lbs. (2.5kgs)
- 7" LCD touchscreen
- Wireless Control (Optional)

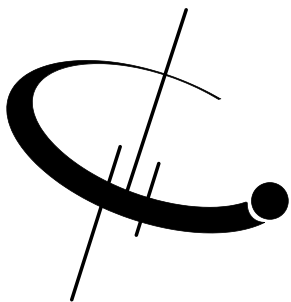
SOFTWARE

- 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





NPL-P-1550

SPECIFICATIONS

OPTICAL

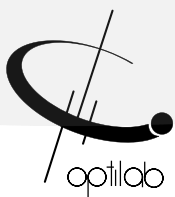
Center Wavelength	1550 ± 10 nm
Optional Wavelength	1310 nm, 1570 nm to 1600 nm
Laser type	DFB, FP available
Laser Linewidth	< 3 MHz
Optical Pulse Width	10 ns to 1000 ns (selectable)
Pulse Repetition Rate	100 Hz to 1 MHz (selectable)
Pulse Contrast Ratio	50 dB typ.
Peak Optical Power	20 mW typ.
Input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

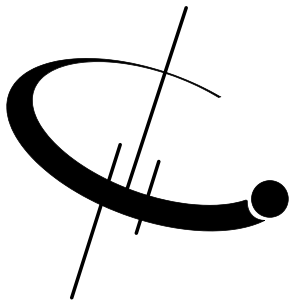
MECHANICAL

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

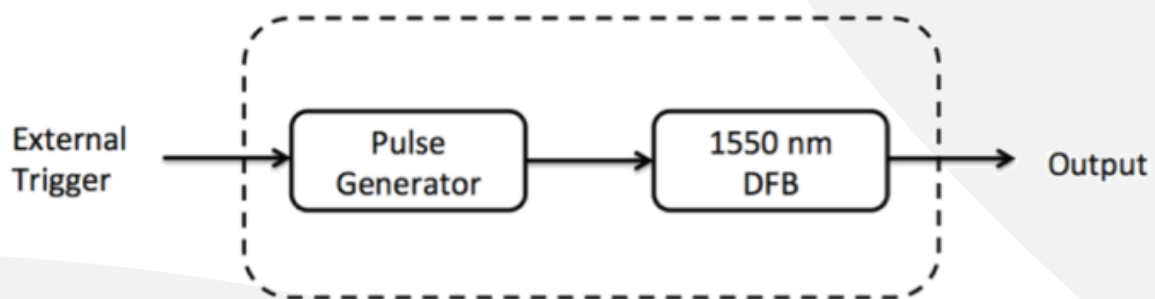
Power Supply	+5V DC External Power Adapter
Backup Battery	Lithium Ion
Display	7" LCD Touchscreen
Battery Life	3 hours Operation
Software	GUI Interface



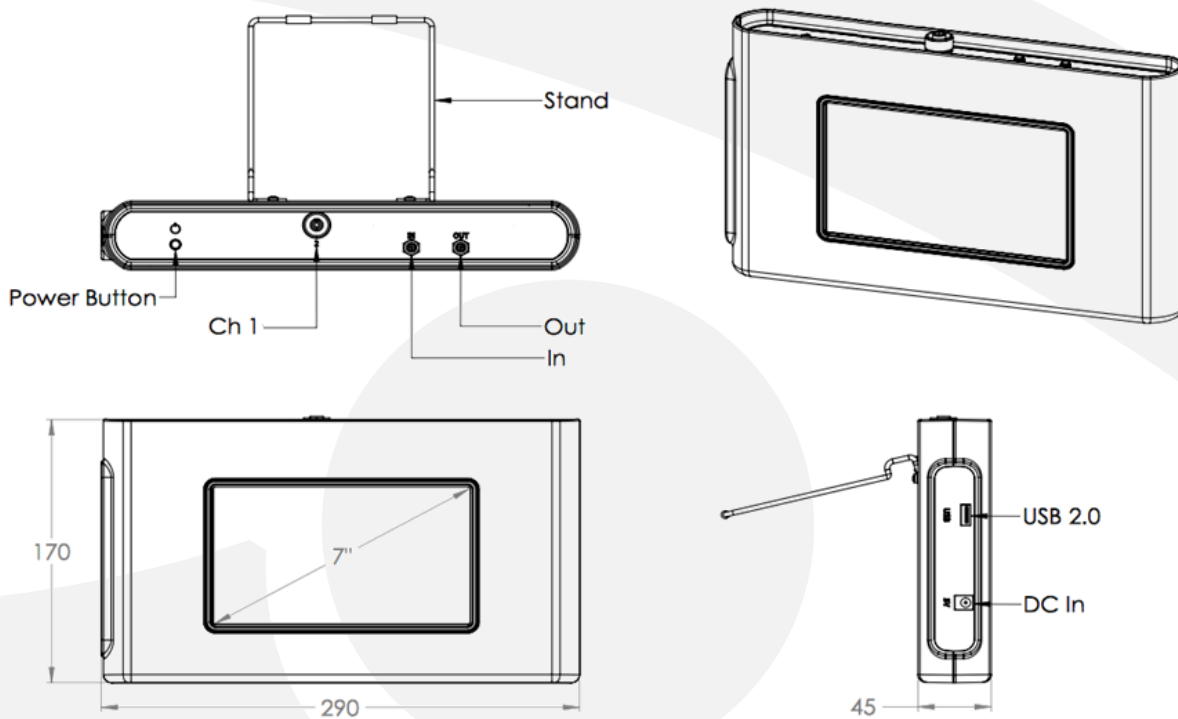


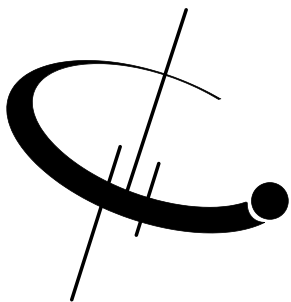
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FUNCTION DIAGRAM



MECHANICAL DRAWINGS





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SCREENSHOT

