

# PNL-1064



## 1064 nm Programmable Nanosecond Laser

The Optilab PNL-1064 is a programmable laser that produces nanosecond pulses with electrical input pulses. It functions as a seed pulse generator for Master Oscillator Power Amplifiers (MOPA). Available in a rackmount or benchtop unit, the PNL-1064 also functions as electrical to optical pulse generator. It consists of a narrow-line-width, ultra stable, high power DFB laser diode for gain switch, direct modulation to provide pure and efficient modulation. The PNL-1064 is available with SM or PM fiber, and is designed for direct modulation of laser current to pulse modulation to produce < 5 ns width optical pulses using an electrical input from an external pulse generator, and the peak output power can reach 500 mW. The laser system is equipped with a standard remote control interface (RS-232) and an LCD display screen for easy user interface, accessible through a front panel adjustment knob. Contact Optilab for more information.

### Features

- 1064 nm ± 15 nm Center Wavelength
- Generate short pulse of < 5 ns
- SM or PM fiber optional
- TTL input for pulse trigger
- Maximum repetition rate of 100 MHz
- Peak power of 500 mW
- Gain switch direct modulation
- High Pulse Contrast of 50 dB

### Applications

- Master Oscillator Power Amplifier (MOPA)
- Research & Development
- Testing & Measurement
- Second Harmonic Generation (SHG)

### Functional Diagram



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## OPTIONS

### PNL-1064-x-y

- x SM or PM fiber
- y Benchtop or Racmount

## TECHNICAL INFO

For technical info and support:

[sales@optilab.com](mailto:sales@optilab.com)

[www.optilab.com](http://www.optilab.com)

## WEB ORDER

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## Optilab Advantage

- Innovation
- Performance
- Quality
- Customization
- Warranty

Optical Specifications	
Center Wavelength & Stability	1064 nm ± 15 nm
Minimum Pulsewidth	< 5 ns
Pulse Repitition Rate	User Programmable from 100 Hz to 50 MHz
Energy per Pulse	up to 20nJ
Pulse Contrast	50 dB
Polarization Extinction	20 dB PM version
Optical Output Power (CW)	> 100 mW SM option
Peak Power Optical Output	500 mW max
Wavelength Adjustment Resolution	0.05 nm (optional)
Electrical Input Specifications	
Frequency	100 Hz to 50 MHz
Input Trigger Level TTL	> 3.5 V
Electrical Connector	SMA
Mechanical Specifications	
Operating Temperature	0° C to +50° C
Storage Temperature	-40° to +70° C
Humidity	10% to 90%
Power Supply	110 V AC and 220 V AC, 50 or 60 Hz
Display	Temperature, Current, Voltage
Controls/Monitoring	LDC display or RS-232 for Laser Switch, EDFA output power through front panel.
Communication Interface	RS-232 interface cabling from PC to units
Dimensions	1RU: 19" x 20.5" x 3.5", or Benchtop
Optical Connector	SMF-28 FC/APC, PANDA FC/APC, or user option
Electrical Connectors	SMA Female