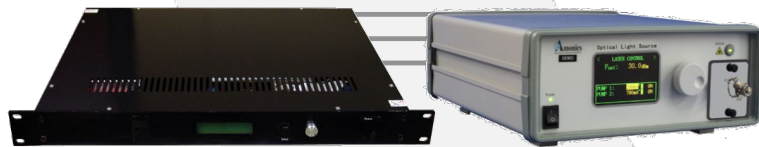


PNL-1064



DEVICE

1064 nm Programmable Nanosecond Laser

OVERVIEW

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.

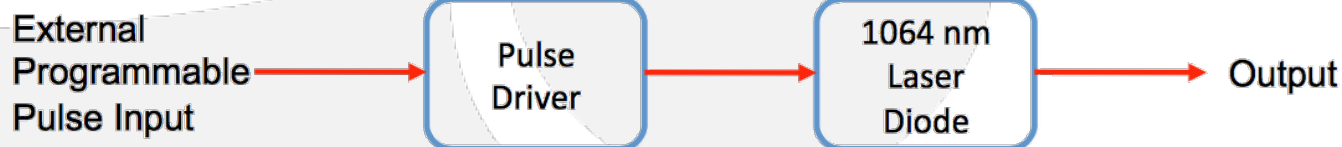
FEATURES

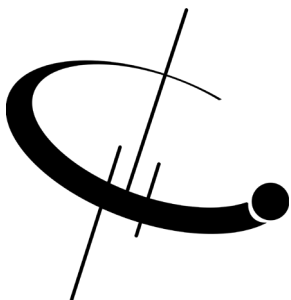
- 1064 nm $\pm$ 15 nm Center Wavelength
- Maximum repetition rate of 100 MHz
- Generate short pulse of < 5 ns
- Gain switch direct modulation
- SM or PM fiber optional
- TTL input for pulse trigger
- Peak power of 500 mW
- High Pulse Contrast of 50 dB

USE IN

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

FUNCTIONAL DIAGRAM





PNL-1064

SPECIFICATIONS

Center Wavelength & Stability	1064 nm $\pm$ 15 nm
Minimum Pulse Width	< 5 ns
Pulse Repetition Rate	User Programmable from 100 Hz to 50 MHz
Energy Per Pulse	Up to 20 nJ
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)

OPTICAL

ELECTRICAL INPUT

Frequency	100 Hz to 50 MHz
Input Trigger Level TTL	> 3.5 V
Electrical Connector	SMA

MECHANICAL

Operating Temperature	0°C to +50°C
Storage Temperature	-40°C 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	LCD 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 Connector	SMA Female

ORDERING OPTIONS

PNL-1064-x-y
x SM or PM fiber
y Benchtop or Rackmount

