# Helium-Neon (HeNe) Laser

(632.8nm – Red Gas Laser) PLHN-100 Series





## **APPLICATIONS**

Optical laser measurement Raman spectroscopy Laser printing Holography experiment Biological material research Laser medical instrument

#### **FEATURES**

Continuous-wave output Long coherence length Low power and high stability

1" external mount and other accessories sold separately

## **Main Specifications:**

Operation Wavelength: 632.8nm (RED) CW

Beam Profile: TEM<sub>00</sub> (single transverse mode;  $M^2 < 1.1$ ;

Output Power: 10: 10mW; 15: 15mW; 20: 20mW; 25: 25mW; 30: 30mW; 35: 35mW;

40: 40mW; or others upon request.

Polarization State: R: Random standard;

P: Polarized upon request, with extinction ratio: 500:1 typ.

Beam Diameter( $1/e^2$ ):  $\leq 2.0$ mm typ;

Beam Divergence: 0.75 mrad typical; < 1.0mrad max.

Power Stability:  $\leq$  5% typical;. Lifespan: 20,000 hrs typ. Operation Temperature: 0° C ~ 60° C

Dimension(Laser Head): 1180mm(L); 105mm x 140mm

Laser Driver: Constant current; Internal starting trigger voltage: 10kV;

Operation voltage: 2.5kV typ.; Operation current: 18mA typ.

Dimension(Laser Driver): 480mm(W) x 150mm(H) x 480mm(D)

Power Requirement: 220Vac/50Hz std; or 110V/50~60Hz per special request

### Optional Items for PLHN-100 Series:

**E**: beam expander(1x2, 1x3, 1x4, 1x5,...)

**AF**: adjustable/focusable mount,

FCP: mounted aspherical fiber coupling lens module (AR coated)

**SMF**: singlemode(SM) fiber pigtailed(FC)

single mode(SM) fiber splitter(1x2, 50/50 typ or others)

**MMF**: multimode(MM) fiber pigtailed(FC)

MSP: multimode (MM) fiber splitter (1x2, 50:50 typ or others)

PMF: polarization-maintaining (PM) fiber pigtailed (FC, slow-axis)

PSP: polarization-maintaining (PM) fiber splitter (1x2, 50:50)

FCO: fiber collimators;

**FPC**: fiber polarization controller etc.,

**WP/Q**: ½-waveplate, zero-order, 1" in diameter **WP/Q**: ½ -waveplate, zero-order, 1" in diameter

**POL10**: CL10mm calcite polarizer

.....upon request.

Photonik reserves the rights to change product designs and specifications at any time without notice.

**Warranty:** 12 months standard. All products are guaranteed to be free from defects in materials and workmanship for a period of one year from date of purchase. Photonik reserves the right to repair or replace defective products at our option. This warranty does not apply to failure of the product due to misuse, abuse, accident, or neglect. Our liability is limited to the price of the part or service we are providing.

Upon request for all accessories for lab jacks, clamps, optical rail, riders, stages, and supporting legs...

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