# Laser Diode (Visible) He-Ne Lasers

LDU33 05-LHP

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**Light Sources** 

## LDU33

Low ripple and noise laser diode module and power supply. Aspheric lens premounted and suitable for either a collimated beam or adjustable focus beam, and compact for adequate OEM.



- Easy adjustment of collimated beam size by using helicoid focusing ring.
- High quality APC power supply allows quick start and stable output.
- User friendly and easy to mount on adjustable holders.

Common Specifications							
Beam Divergence	<1mrad						
Output Stability	<3%						
Temperature Control	None						
Laser Classes	3R						
Input Voltage	100VAC						
Head Weight [kg]	about 0.15						
Weight of Power Supply [kg]	about 0.3						

RoHS

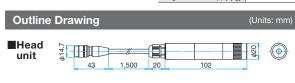
#### Guide

- ▶ For custom wavelengths, outputs and modulation, contact our Sales Division for more information.
- ► Can be mounted with the laser mount (MHG-20LDU) for the kinematic mirror holder.

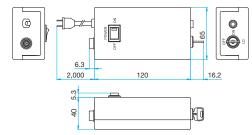
#### Attention

▶ Power supply voltage for the 405nm model is 9V.

Part Number	Wavelength [nm]	CW Output [mW]	Beam Diameter [mm]	Drive Voltage [V]
LDU33-405-3.5	405	3.5	about 2×1	9
LDU33-635-4.5	635	4.5	about 5×2	5
LDU33-670-4.5	670	4.5	about 5×2	5
LDU33-785-4.5	785	4.5	about 5×2	5



■Power unit



#### 05-LHP



Standard He-Ne laser, designed in aluminum housing, consists of a laser head with oscillation wavelength of 632.8nm, a laser tube, ballast resistor and electrical wiring.

- 1.8 meter length cable connected.
- Compliance with the provisions of CDRH (U.S. Safety Standard).

#### Guide

**Outline Drawing** 

- ► Mounted on Cylindrical Laser Mounts (LAH) and Adjustable Laser Holders (LAHU-A).
- ▶ A general service life is one year or 10,000 hours.
- ► Contact our Sales Division for random polarization.

### Attention

As imported products, prices and lead times are subject to change.

#### **Common Specifications** Beam Quality $M^2:<1.05$ Wavelength 632.8nm Transverse Mode TEM<sub>00</sub> Angular error Centrality <1mrad of Beam Position ±0.25mm Long Term Drift ±2.5% (at 8 hours) Noise (RMS) < 0.5% 30Hz - 10MHz Noise Frequency 100VAC, 115VAC, or 230VAC±10% Power Voltage Input Frequency 50 – 60Hz Shock 25G/11msec Operation Temperature Range -20°C - +40°C Storage Temperature Range -40°C - +80°C 0% - 90%Operation Humidity (without condensation) Storage Humidity 0% - 100%

Output beam	B	Linear Polarized Beam Part Number	A [mm]	φB [mm]		
Ш		05-LHP-213	177.8	φ31.8		
	A	05-LHP-211	177.8	φ31.8		
Linear polari	rized laser polarization direction	05-LHP-111	271.8	φ44.5		
ith 1/4 turn en/close shutter	Shutter direction	05-LHP-121	271.8	φ44.5		
Op Op	pen Close Accessory mounting holes	05-LHP-151	396.2	φ44.5		
(°) @	four points on circumference	05-LHP-171	455.9	φ44.5		
401.04	diameter 36mm 4-40UNC tap Power connection cable (1.8m)	05-LHP-991	483.9	φ44.5		
φ31.8 type <sup>†</sup> φ35.1 type	φ44.5 type	05-LHP-925	637.3	φ44.5		
Linear Polarized Beam (Extinction Ratio>500:1)						
	CW Output Power Beam Diameter Beam V	ertical Mode Spacing Or	peration	Operation		

Linear Polarized Beam (Extinction Ratio>500:1)									
Part Number	CW Output Power TEMoo [mW]	Beam Diameter 1/e <sup>2</sup> [mm]	Beam Divergence [mrad]	Vertical Mode Spacing C/2L [MHz]	Operation Current [mA]	Operation Voltage [V±100]	IEC Class	Power Supply	Weight [kg]
05-LHP-213	0.5	0.46	1.77	1063	4	1,320	2	05-LPL-900-040	0.2
05-LHP-211	0.84	0.46	1.77	1063	4	1,320	3R	05-LPL-900-040	0.2
05-LHP-111	1	0.59	1.35	687	6.5	1,790	3R	05-LPL-911-065	0.4
05-LHP-121	2	0.59	1.35	687	6.5	1,790	3R	05-LPL-911-065	0.4
05-LHP-151	5	0.8	1	438	6.5	2,290	3B	05-LPL-902-065	0.6
05-LHP-171	7	1.02	0.79	373	7	2,650	3B	05-LPL-951-070	0.68
05-LHP-991	10	0.65	1.24	341	6.5	2,640	3B	05-LPL-951-065	0.66
05_L HD_025	17	0.06	0.84	257	7	3 000	3B	05_LDL_051_070	NΩ