

# Direct Diode Laser System

Tentative 普通

DL0450080001 VTO

## 450nm 800W Fiber coupled Diode Laser System



### Features

- ◇ 450nm Wavelength
- ◇ 0.22NA
- ◇ Laser Stability Controlled
- ◇ CW and Modulated Pulse Modes
- ◇ Excellent Current-Laser Transfer

### Applications

- ◇ Copper Welding
- ◇ Aluminum Welding
- ◇ Precision Welding
- ◇ 3D Printing
- ◇ Additive Manufacturing

Turning Point Lasers (TPL), a pioneering optoelectronics company based in Taiwan, has made significant strides in the field of laser technology with the blue laser system. This system is notable for its 450nm emission, making it a robust tool for industrial applications. The high wall-plug efficiency nearing 35% is a testament to the advanced technology employed by TPL, which relies on highly reliable, entirely sealed high-efficiency single-emitter diodes. These blue lasers are versatile and find applications in processes such as soldering, metal hardening, welding, and additive manufacturing. The innovation and reliability of TPL's blue laser systems underscore their commitment to providing solutions that meet the evolving needs of modern industry.

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**TPL**

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## Optical Characteristics

Optical Characteristics	UNIT	BDL450-800
Wavelength	nm	450
Bandwidth	nm	10
Mode of Operation		CW/Modulated
Modulation Frequency	kHz	0-5
Average Power	W	800
Power Tunability	%	10-100
Output Fiber Core Diameter	μm	330
Power Stability	%	*<2

\*Over 8 hours, T= ±1°C

## General Characteristics

General Characteristics	UNIT	BDL450-800
Fiber Termination		QBH-type connector
Delivery Fiber Length	m	5
Cabinet Dimensions(W x D x H)	mm	448 x 650 x 123.5
Weight	Kg	45
Joint Diameter	mm	25
Cooling		Water Cooling
Power Supply		AC 220V,50 / 60 Hz
Control Mode		RS232 / WIFI / Ethernet

## Environmental Characteristics

Environmental	UNIT	BDL450-800
Water Cooling Temp.	°C	25
Water Cooling Flow	L/min	8~10
Water Cooling Pressure	Bar	4
Operation Temp	°C	10-40
Humidity	%	10-80

## OPERATING NOTES

- Avoid eye and skin exposure to direct radiation during operation.
- Make sure the fiber output end is properly cleaned before operation of laser.
- Specifications are subject to change without note.

