

# UV-Violet-Blue Multi-Emitter Fiber-coupled Diode Laser

405nm/10W  
435nm/40W



## GENERAL DESCRIPTION

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The HLP series of diode laser modules are designed with the thermal management and electrical interface. These compact, easy to use modules are available in 405nm and 435nm wavelengths and typical output powers up to 40W. The HLP series diode lasers featured diode-to-fiber combining of reliable sealed single-emitters and are ideal sources for Laser Direct Imaging (LDI) in PCB photolithography process, medical and scientific industries.

## SERVICE

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Optionally, we offer the complete value chain:

We design and develop laser modules which are optimized to meet the specific requirements of your application.

In order to evaluate the performance of the lasers in the design phase we offer the rapid manufacture of prototypes and small series production.

## APPLICATIONS

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- Laser Direct Imaging (LDI) in PCB manufacturing
- Material processing

## FEATURES

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- Compact package with integrated driver electronics and cooling features.
- Uniform light distribution from fiber bundle
- More wavelengths of 380nm-440nm are available on request

## Specifications

### Optical (25°C)

Parameter	Unit	HLP-405-10.0-M40022	HLP-435-40.0-M50022
Output power*	W	10	40
Center wavelength	nm	405	435
Spectral width (FWHM)	nm	6	6
Operating mode	-	CW	
Power stability	%	2	
Fiber core diameter	μm	400	500
Fiber N.A.	-	0.22	0.22
Fiber connector	-	SMA	
Fiber length	m	5	

### General

Parameter	HLP-405-10.0-M40022	HLP-435-40.0-M50022
Supply Voltage	DC 24V (2.4A)	DC 24V (7.8A)
Control interface	DB-15	
Cooling	Water-cooled	
Cooling water quality	Deionized water	
Water cooling Temperature	20 °C	
Water flow rate	≥ 2L/min	≥ 5L/min
Water connector	Ø6mm copper	Ø8mm copper
Module dimensions (WxDxH)	356mm ×206mm ×44mm	