

## 445nm Fiber Detachable Laser Module

### Features:

- 450nm
- Fiber Detachable Package
- With Fiber Detection Function
- Built in Red Aiming Beam

### Applications:

- Medical Laser Treatment
- Others



WAVESPECTRUM can offer high stability Medical Laser Module with the wavelength range of 375nm ~ 1920nm, the output power upto 50W. We choose the world's top level laser chips in making the lasers to ensure the high quality. And the lasers will undergo severe restricted aging and testing before sending to the customers. For Meidcal Laser Module, we have integrated several special function to support medical application, such as Photodiode, TE Cooler, Thermistor, Aiming Beam and Fiber Detector. We use the SMA905 Fiber Detachable Connector as standard connector, customer can easily replace the Medical Fiber with it, such as 105um, 200um, 400um, 600um or 800um Fiber. For Aiming Beam, we offer the Red (635nm, 650nm) and Green (520nm) Pilot Laser as optional. Meanwhile, Dual-wavelength, Tri-wavelength, 4-wavelength and Multi-wavelength Medical Laser Module can be customized according to customer needs. The Medical Laser mainly used in Dental Laser, Endovenous Laser Ablation (EVLA), Surgical Operation, PDT, Skin Treatment, Rehabilitation Therapy and Laser Ablation, etc.

WAVESPECTRUM can offer various wavelengths listed as below: 375nm, 405nm, 445nm/450nm, 465nm, 488nm, 505nm/510nm, 515nm/520nm/525nm, 633nm, 635nm/638nm/640nm/642nm, 650nm/658nm/660nm, 670nm, 685nm/690nm, 705nm, 730nm, 755nm/760nm/770nm, 780nm/785nm, 795nm, 800nm/808nm/810nm, 820nm/830nm, 840nm/850nm/860nm, 880nm, 905nm,915nm, 940nm, 976nm/980nm, 1060nm/1064nm, 1210nm, 1270nm, 1280nm, 1290nm, 1310nm, 1330nm, 1350nm, 1370nm, 1390nm, 1410nm, 1430nm, 1450nm, 1470nm, 1490nm, 1510nm, 1530nm, 1550nm, 1570nm, 1590nm, 1610nm, 1625nm, 1650nm, 1720nm, 1900nm, 1920nm.

WAVESPECTRUM can provide a variety of laser products: single mode laser diode, multimode laser diode, single mode fiber coupling laser modules, polarization maintaining fiber coupled laser modules, multi-mode pigtailed laser modules, fiber detachable laser module, RGB white fiber coupled laser module, medical laser module, turnkey fiber coupled laser system, etc. The main packages for the lasers can be: TO18 | TO5 | C-mount | TO3 | E-mount | H-mount | COS | 2-pin | 4-pin | 9-pin | 14-pin.

WAVESPECTRUM - welcome to inquiry any time!

Pls visit our Website for more info.: <http://www.wavespectrum-laser.com.cn/index.html>

### MORE CHOICES, MORE IDEAS

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Laser Diode		Fiber Coupled Laser Module		Fiber Receptacle LD		Laser System		RGB Pigtailed White Laser		Medical Laser Module		
375nm	405nm	445nm	465nm	488nm	505nm	520nm	525nm	635nm	650nm	660nm	670nm	680nm
685nm	760nm	785nm	790nm	808nm	830nm	850nm	860nm	880nm	905nm	915nm	940nm	980nm
1064nm	1210nm	1270nm	1280nm	1290nm	1310nm	1330nm	1350nm	1370nm	1390nm	1410nm	1430nm	1450nm
1470nm	1490nm	1510nm	1530nm	1550nm	1570nm	1590nm	1610nm	1625nm	1650nm	1720nm	1900nm	1920nm

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## 445nm Fiber Detachable Laser Module

Part Number		WSLR-445-020-400M-H-A-FD		
PARAMETER		SYMBOL	VALUE	UNIT OF MEASURE
Reverse Voltage		$V_r$	2.0	V
Operating Temperature		$T_{op}$	0~+60	°C
Storage Temperature		$T_{stg}$	-40~+85	°C
Lead Soldering Temperature (10 sec.)		$T_{is}$	260	°C
Typical Specification (@25°C)		Min.	Typical Value	Max.
Optical Specifications	Center Wavelength	450nm+/-15nm		
	Output Power	----	20W	----
	Spectral Width(FWHM)	----	5.0nm	----
	Wavelength Temp. Coefficient	0.05nm/°C		
	Laser Type	FP		
Electrical Specifications	Threshold Current	----	0.3A	0.5A
	Operating Current	----	3.0A	3.3A
	Operating Voltage	----	36V	44V
Applicable Fiber Specifications	Fiber Type	Multi-Mode Fiber		
	Fiber Core	400um (or more)		
	N.A.	0.22 (or more)		
	Detachable Connector	SMA905		
TE Cooler Specifications	TE Cooler	Without		
	TEC Current (Max.)	----		
	TEC Voltage (Max.)	----		
Thermistor	Thermistor (@25°C)	Optional		
Photodiode Specifications	Photodiode	Optional		
	PD Current	----	----	----
	PD Reverse Voltage (Max.)	----		
Fiber Detector Function	Fiber Detector	Built in		
Aiming Beam Specifications	Aiming Beam	Built in		
	Standard	>2mW @650nm±20nm (Red)		
	Customized	>2mW @520nm (Green) Optional		
Others	Package	P5		
	Recommended Operating Temp.	25°C		



## 445nm Fiber Detachable Laser Module

### Package View:

#### P5 Package View:

(Part Number: WSLR-445-020-400M-H-A-FD)

