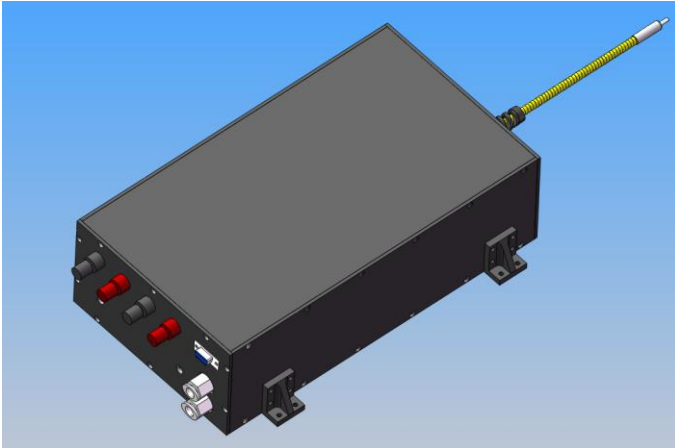


## T-Series High Power Laser Diode Module

### M808±10-500-F-M2

#### Introduce



Han's TianCheng Semiconductor Co.,Ltd., founded in November 2011 in Beijing Development Area, is a subsidiary company of Han's Laser. Han's TianCheng has advanced research, technological infrastructure and experience in the development and production of diode lasers with self-developed technology, especially in fiber coupled laser modules. Han's TianCheng provides high power semiconductor laser products which are widely used in the fields such as material processing, diode-pumped solid-state pumping, fiber laser pumping, laser display, medical application and scientific research

Han's TianCheng dedicates to the development of high brightness fiber coupled diode laser modules with output power from ten to hundreds of watts, and the wavelength from 635nm to 1550nm. We can also provide special wavelength and multi-wavelength products, and other customizing products and OEM services.

#### Features:

- ◆ High output power up to 500W
- ◆ 400μm\*5 core multimode optical fiber
- ◆ 0.22NA

#### Accessories:

- ◆ Thermistor

#### Applications:

- ◆ Fiber laser pumping
- ◆ Medical use
- ◆ Material processing

## Typical Device Performance (25°C)

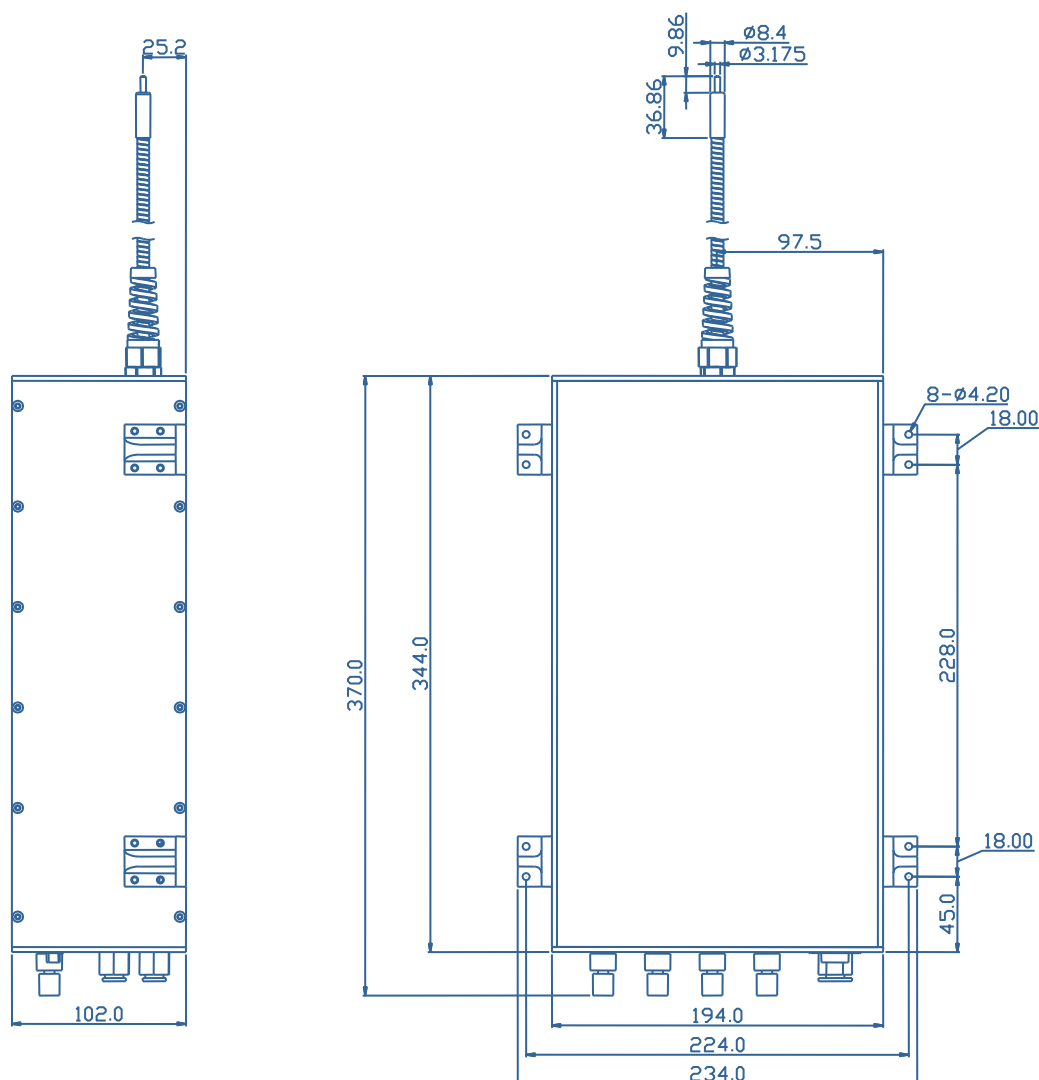
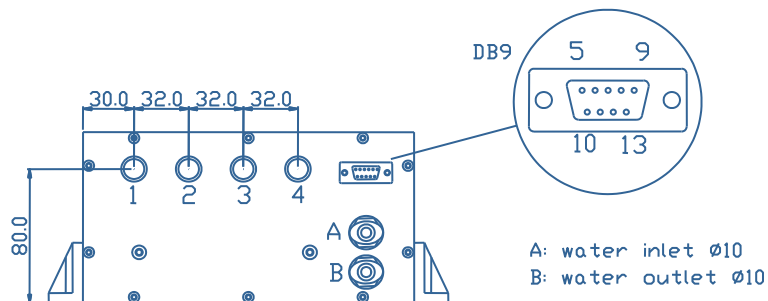
	Symbol	Typical Value	Unit
<b>Optical</b>			
CW Output Power	$P_{op}$	500	W
Center Wavelength	$\lambda_c$	$808 \pm 10$	nm
Spectral Width (90% of Power)	$\Delta\lambda$	<10.0	nm
Wavelength Shift with Temperature	$\Delta\lambda/\Delta T$	0.35	nm/°C
<b>Electrical*</b>			
Threshold Current	$I_{th}$	1.5	A
Operating Current	$I_{op}$	11	A
Operating Voltage	$V_{op}$	$60 * 2^{T_{11}}$	V
Slope Efficiency	$\eta_{es}$	$29 * 2^{T_{11}}$	W / A
Power Conversion Efficiency	$\eta_{ep}$	40	%
<b>Fiber</b>			
Fiber Core Diameter	$d_{core}$	400	μm
NO. Of Fiber	-	5	
Fiber Cladding Diameter	$d_{clad}$	-	μm
Fiber Buffer Diameter	$d_{buffer}$	-	μm
Numerical Aperture	NA	0.22	-
Fiber Connector	-	-	-

2 groups of LDs assembled inside the module, the typical driving voltage of each group is 60V.

## Absolute Ratings

	Min	Max	Unit
Operating Temperature	10	40	°C
Operating Relative Humidity	-	75	%
Storage Temperature	-20	80	°C
Storage Relative Humidity	-	90	%
Lead Soldering Temperature, 10 s max	-	250	°C

### Package Dimensions (mm)



Pin Assignment	
Pin	Function
1	1 LD (－)
2	1 LD (+)
3	2 LD (－)
4	2 LD (+)
5	Thermistor 1
6	Thermistor 1
7	Thermistor 2
8	Thermistor 2
9	Thermistor 3
10	Thermistor 3
11	Thermistor 4
12	Thermistor 4
13	