

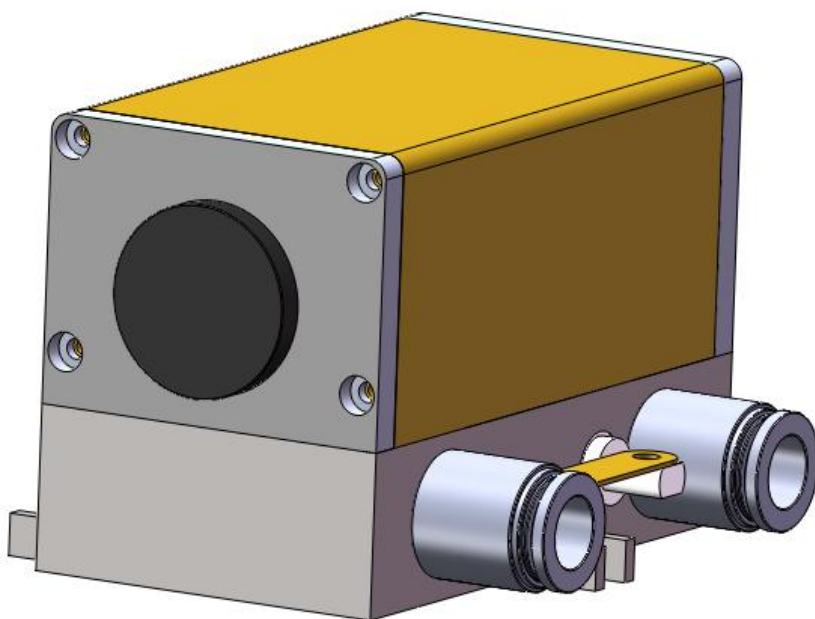


PN: DG-LP15-300-A5L10-1064FB

300W QCW 1064nm

Macro-channel Semiconductor Laser Side Pump Module

宏通道半导体激光器侧泵模块



| Version | Change Items | Released Date |
|---------|--------------|---------------|
| Rev 1   | Initial      | 2023.10.26    |
|         |              |               |

**主要特性 Key Features:**

- 金锡焊料封装 / AuSn packaging
- 高可靠性 / High reliability
- 长脉宽/ Long pulse-width operation

|                                    |                 | Unit |
|------------------------------------|-----------------|------|
| Pump Power                         | 1000            | W    |
| Peak Wavelength                    | 808             | nm   |
| QCW Power                          | 300             | W    |
| Peak Wavelength                    | 1064            | nm   |
| <b>Optical Parameter</b>           |                 |      |
| Number of Bars                     | 15              |      |
| Rod Material                       | Nd:YAG          |      |
| Rod Diameter                       | 3               | mm   |
| Rod Length                         | 90              | mm   |
| Rod Terminal                       | Flat / AR       |      |
| <b>Electrical Parameter</b>        |                 |      |
| Operating Current                  | ≤85             | A    |
| Threshold Current                  | 17              | A    |
| Operating Voltage                  | 30              | V    |
| <b>Water Parameter</b>             |                 |      |
| cooling                            | Distilled Water |      |
| Water Temperature(No Condensation) | 25              | °C   |
| Water Pressure                     | ≤0.45           | MPa  |
| Minimum Flow Rate                  | ≥10             | lpm  |
| Storage Temperature                | -45-85          | °C   |
| <b>Operation Condition</b>         |                 |      |
| Pulse Width                        | us              | 200  |
| Duty Cycle                         | %               | 5    |

输出功率测试条件：450mm±5mm 平平腔，输出镜透过率 30%。

备注：

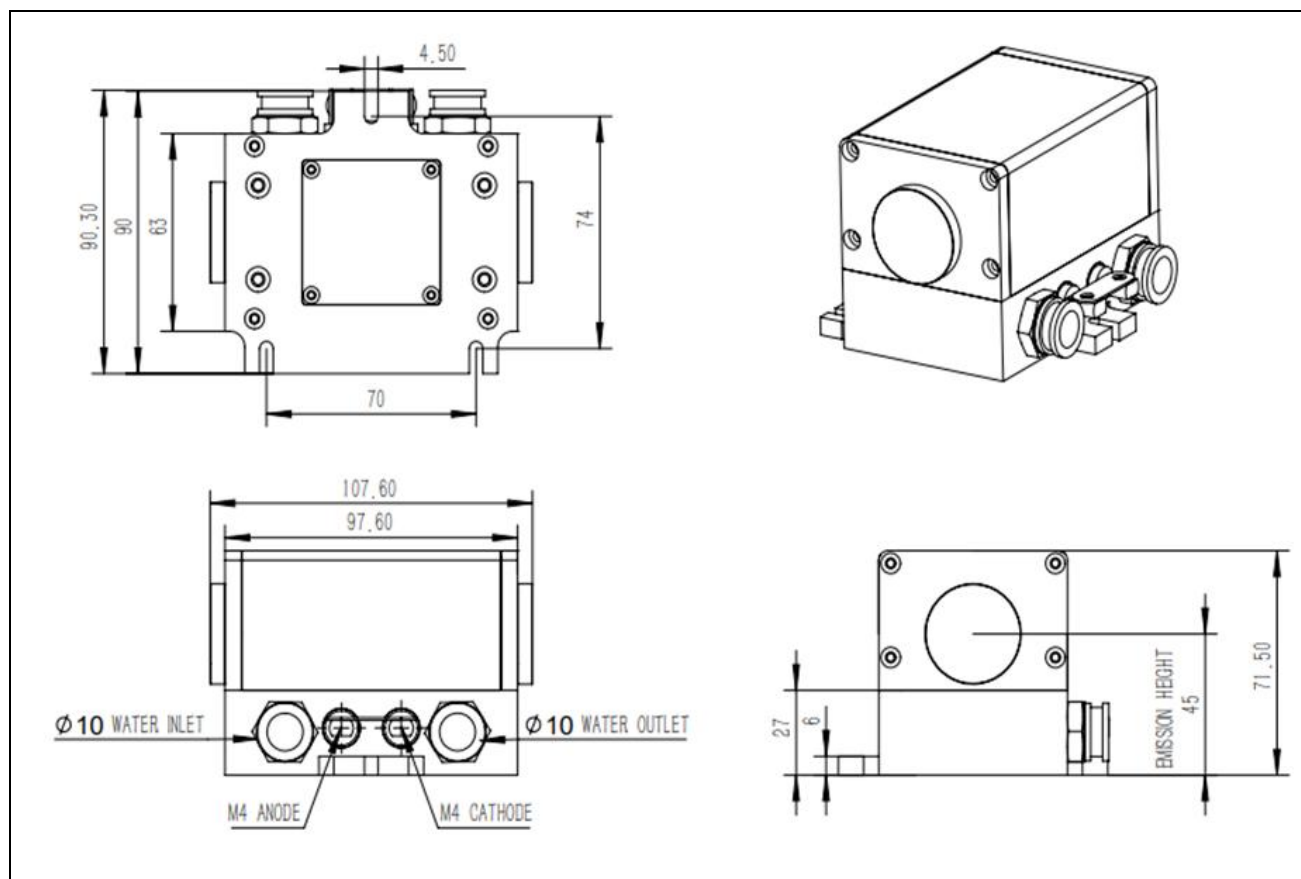
<sup>1</sup> 在冷却水 25 摄氏度下测得。Tested at a cooling water temperature of 25°C.

<sup>2</sup> 在不结露条件下使用和存储。No-condensing required for operation and storage.

<sup>3</sup> 超规格使用会导致激光器寿下降。Reduced lifetime if used above nominal operating condition.

## 外形尺寸/ Dimension

DG-LP15-300-A5L10-1064FB:



Customized dimension available upon request

### 使用说明 Application Notes:

- 叠阵输出激光会伤眼睛，使用时须遵守 IEC 四级激光标准安全规范，避免激光直接或间接照射眼睛；  
The laser beam could hurt eyes, please follow the standard safety procedures for IEC Class 4 lasers, avoid eyes exposure to radiation.
- 静电击穿导致半导体激光器失效，激光器安装人员须经过培训，操作时须佩戴防静电手腕带，工作台需接地；在供电接头与激光器连接前，正负极应处于短接状态；  
ESD cause diode laser failure, The operator should be trained, wearing ESD grounding straps and the work surface should be grounded. The positive and negative poles shall be connected before the power supply is connected with the laser.
- 电流过冲可能损坏激光器，驱动电源须稳定无过冲。  
The current overshoot may damage the laser, and the driving power must be stable without overshoot,

