| 3KM OPTOELECTRONICS | Product Specification | Version |
|---|---|---|
| | | V1.0 |
| Product Type | InfraredLaser Lighting Module | |
| Product Name | IR-808-2000-S | |
| Product Number | K10010149 | |
| Product Size | L*W*H=171*66*76mm | |

**Application Range：**

**City-wide surveillance, smart transportation, fire watch, oil depots, large factories, security departments, vehicle-mounted systems, prisons, border and maritime defense, ecological reserves, mining sites, water and power grid inspection, terminals, ports, law enforcement, and maritime patrol, etc.**

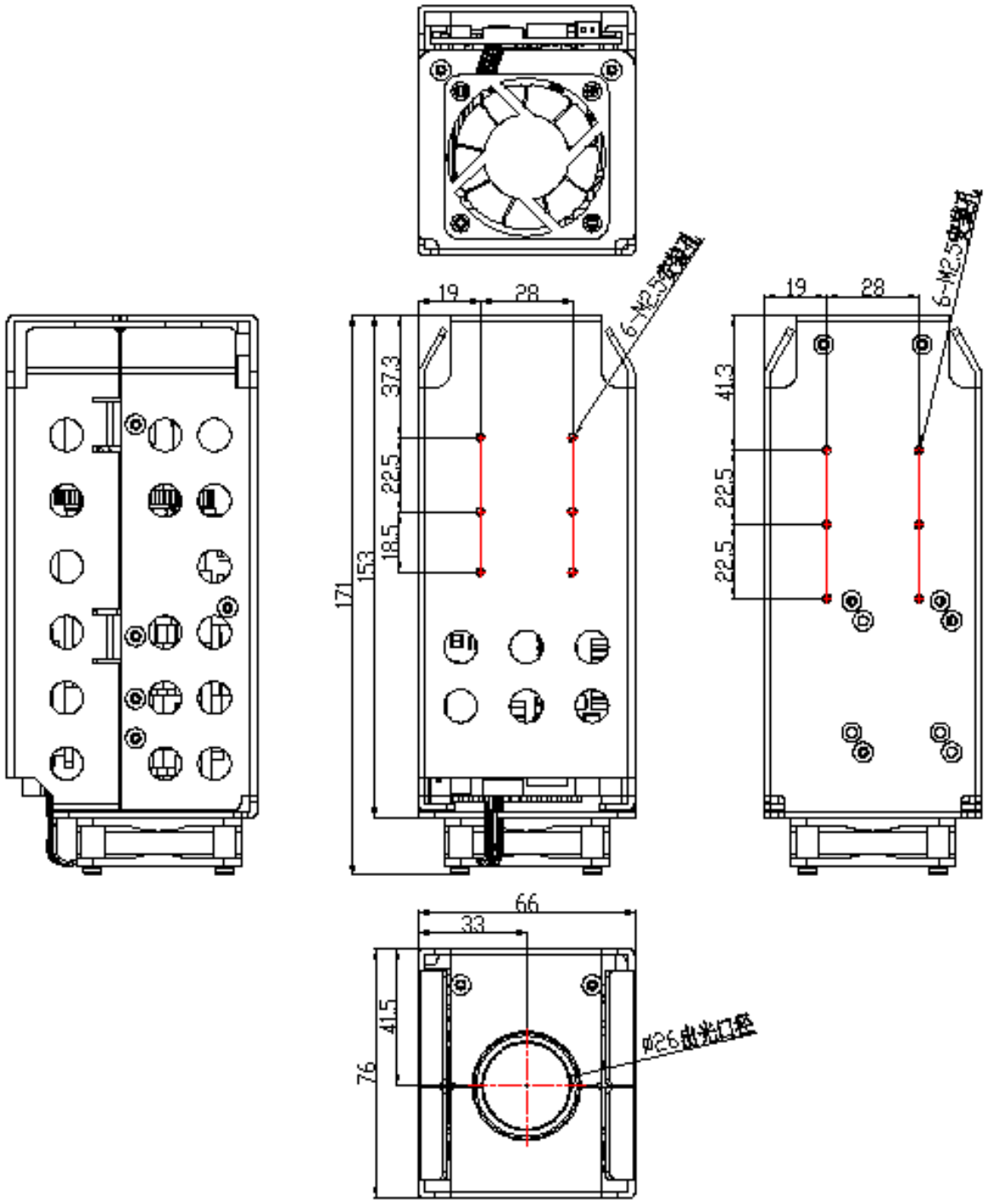
**Statement：**

**This specification is copyrighted by Shenzhen 3KM Optoelectronics Technology Co., Ltd., and may not be distributed to personnel who are not employed by 3KM Optoelectronics Technology Co., Ltd. without the written approval of the company. It may not be used, copied or modified in whole or in part, and may not be disclosed in any way. 3KM reserve the right to update the technical parameters of the product to ensure that the latest and best products are provided to the customer.**

| 3KM Optoelectronics Technology Co., Ltd. | | File Type： Specification |
|---|---|---|
| **Prepared** | ZJY | Nov 5, 2024 |
| **Review** | LZHJ | Nov 5, 2024 |
| **Approve** | WYM | Nov 5, 2024 |

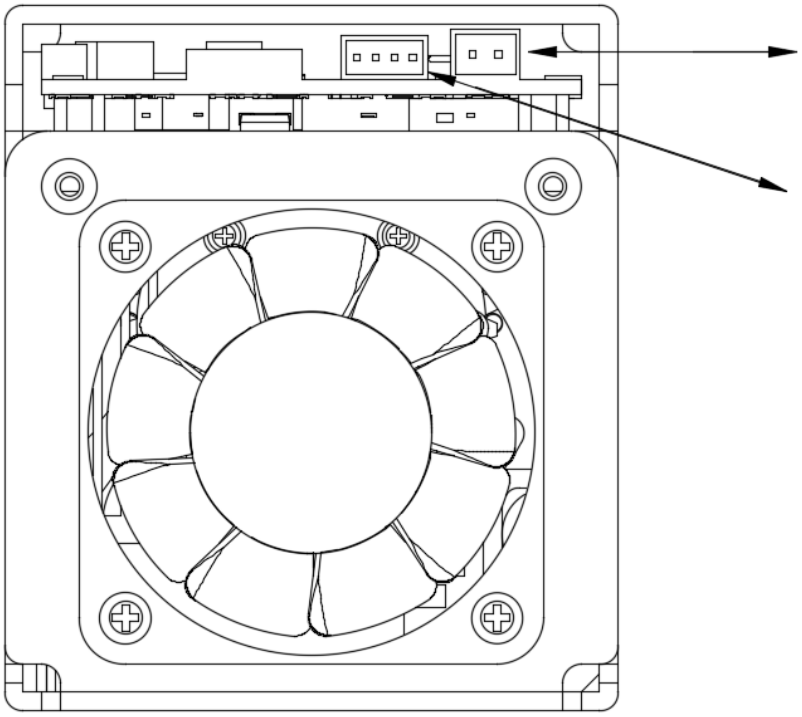
| Optical and Electrical Parameters | |
|---|---|
| **Item** | **Parameters** |
| **Size** | L*W*H：171*66*76mm |
| **Weight** | ≈650g |
| **Input Voltage** | DC 24V±10% |
| **Input Current** | 1.5A±0.2A |
| **Initialization Time** | <10s |
| **Total Power** | ≤40W |
| **Output Optical Power（$P_o$）** | 12.5W±0.5W |
| **Center Laser Wavelength** | 808±10nm(@25℃) |
| **Illumination Angle** | 0.8°~70°(Continuous zoom) |
| **Spot Diameter** | φ28m(@0.8°,@2000m) |
| **Effective Range** | ≥2000m |
| **Communication Interface** | RS-485/UART portTTL(Default: 9600bps) |
| **Communication Protocol** | Pelco_D |
| **Operating Mode** | Continuous Working Mode |
| **Service Life** | > 20000H |
| **Storage Temperature** | -50℃~+100℃ |
| **Operating Temperature** | -35℃~+55℃ |
| **Laser Safety Level** | Class IV(IEC 60825) |
| **Laser Safety Distance** | ≥110m(@0.8°， @$P_o$max) |
| **Environmental Standards** | ROHS 2.0 |

**Product Size**




unit: mm

**Pin Definition**



Connector Type: 2.54*2p

| From Left To Right | |
|---|---|
| 1 | DC24V |
| 2 | GND |

Connector Type: 2.0*4p

| From Left To Right | |
|---|---|
| 1 | TX |
| 2 | RX |
| 3 | 485A |
| 4 | 485B |

## Precautions

- This IR laser illuminator is classified as a Class IV non-visible light laser. While the laser is on, staring back at or observing the laser with an optical instrument is ***strictly prohibited***.
- While the IR laser illuminator is on, flammable objects are ***strictly prohibited*** within ***100cm*** in front of the lens to prevent fires.
- The IR laser illuminator should be installed where people ***cannot*** see it directly, ***or*** at a ***safe distance (>110m)***where people can see it directly. Manufacturers should choose the laser radiation power according to its actual application environment to ***avoid*** hurting people's eyes.
- Manufacturers using this IR laser illuminator should put ***warning labels*** for laser radiation.
- Please contact our qualified maintenance personnel for service when a device fault occurs. The warranty ***will expire*** if the device is disassembled by anyone else.

**ContactInformation**

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