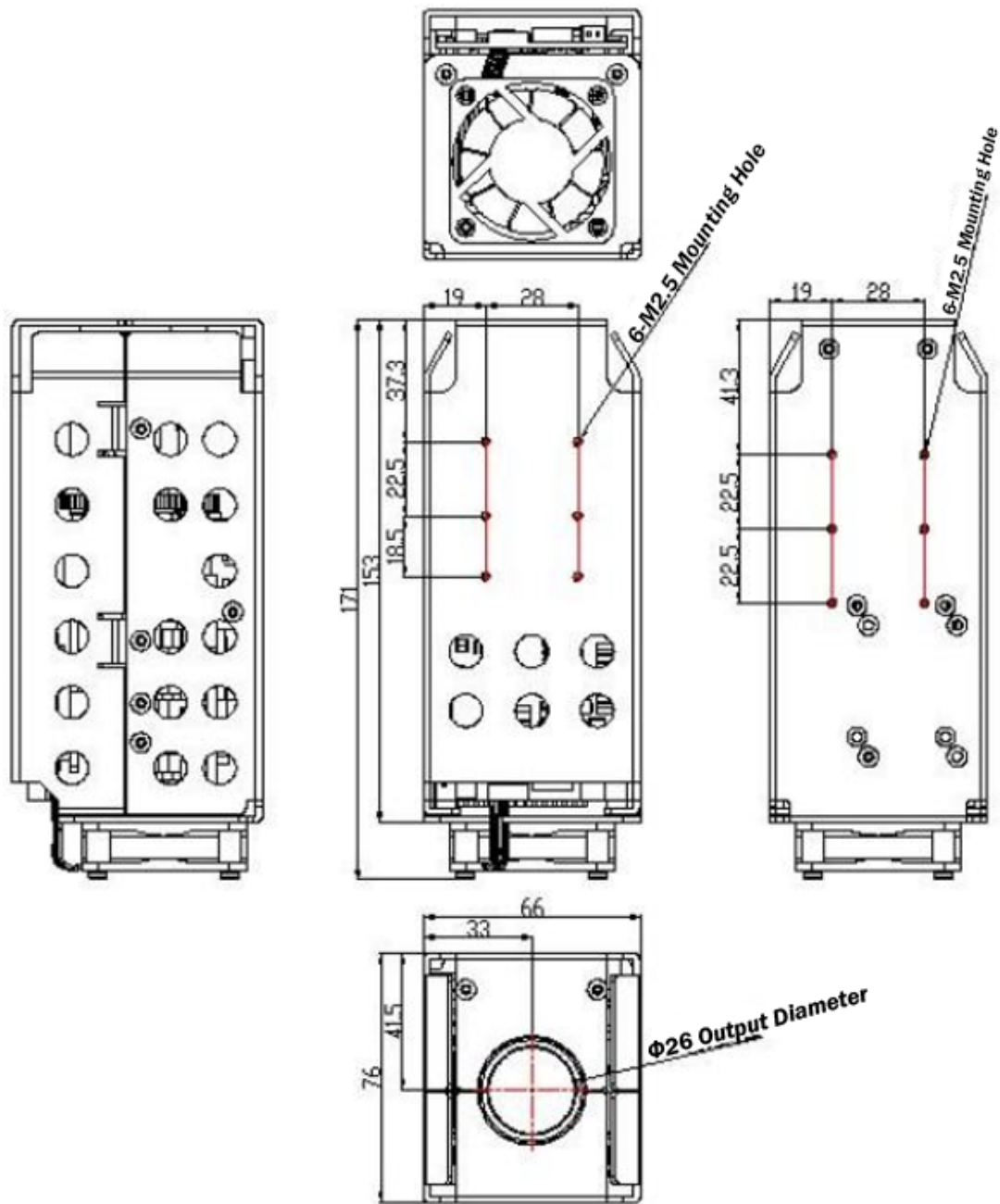


3KM 3KM OPTOELECTRONICS	Product Specification	Version
		V1.0
Product Type	Infrared Laser Lighting Module	
Product Name	IR-1550-1000-S-01	
Product Number	K10010427	
Product Size	L*W*H=171*66*76mm	
Application Range:		
City-wide surveillance, smart transportation, fire watch, oil depots, large factories, 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	Jan 20, 2026
Review	LZHL	Jan 20, 2026
Approve	LZHJ	Jan 20, 2026

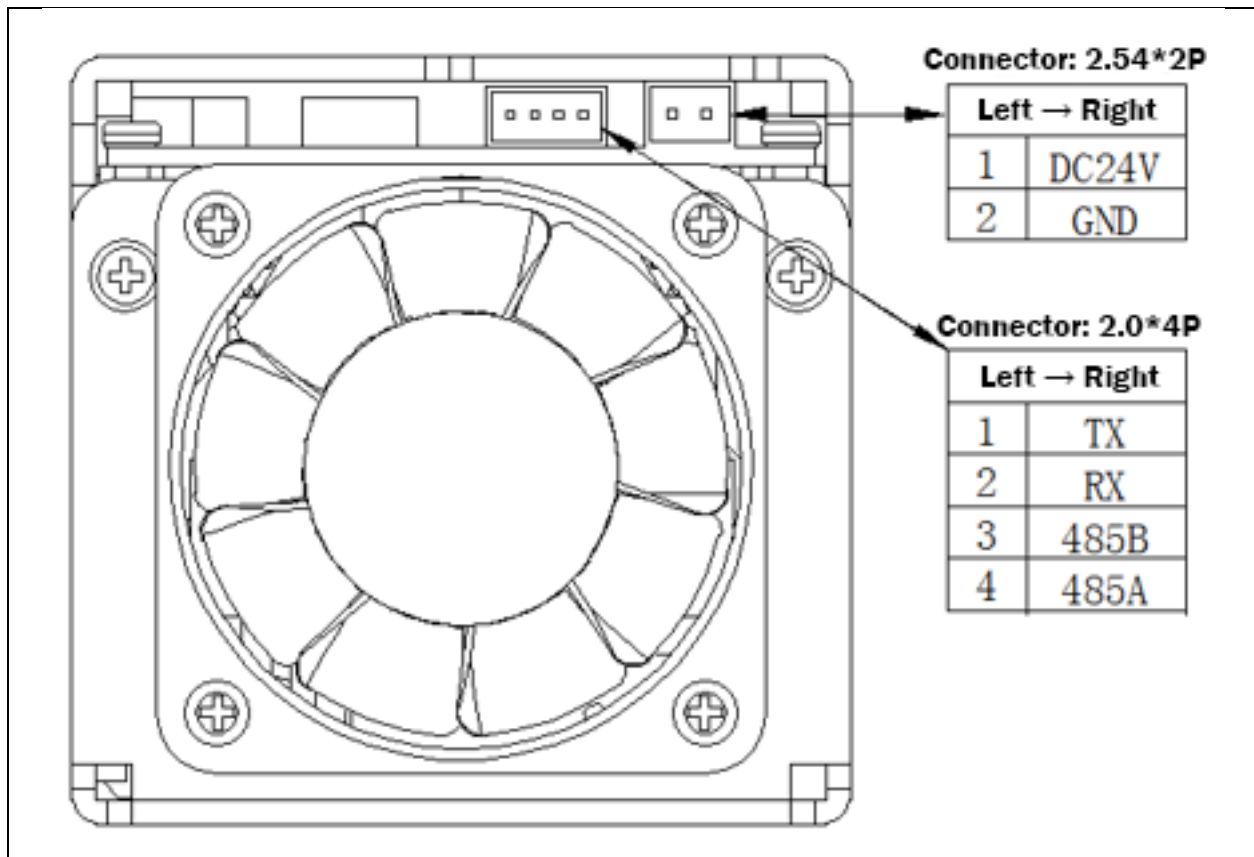
Optical and Electrical Parameters	
Item	Parameters
Size	L*W*H: 171*66*76mm
Weight	<650g
Input Voltage	DC 24 V±10%
Input Current	1.4A±0.3A
Initialization Time	≤3s
Total Power	≤41W
Optical Output Power (P _o)	4±0.5W
Center Laser Wavelength	1540±20nm(@25℃)
Effective Range	≥1000m
Illumination Angle	@0.8°, range ≥1000m, light spot Φ14m
	@70°, range ≥40m, light spot Φ56m
Communication Interface	RS-485/UART portTTL(Default: 9600bps)
Communication Protocol	Pelco_D
Operating Mode	Continuous Working Mode
Service Life	> 20000H
Storage Temperature	-50℃ to +100℃
Operating Temperature	-35℃ to +55℃
Laser Safety Level	Class 3B
Laser Safety Distance	5m(@0.8°, @P _o max)
Environmental Standards	RoHS 2.0

Product Size



unit: mm

Pin Definition



Precautions

- This IR laser illuminator is classified as a Class 3B 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 (>50m)** 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.

Contact Information

Company Name: 3KM Optoelectronics Technology Co., Ltd.
 Business Phone: +86-0755-6686 4401
 Company website: www.sz3km.com
 Email: sales@sz3km.com
 Address: 12F, Building 1, Heng Changrong Hi-Tech Park, No. 128 Shangnan East Road, Xinqiao Street, Baoan District, Shenzhen, P.R.C