3KM OPTOELECTRONICS	Product Specification	Version
		V1.1
Product Type	Infrared Laser Lighting Module	
Product Name	IR-850-800-T	
Product Number	K10010290	
Product Size	L*W*H=64*27.4*40.6mm	

Application Range：

Safe city, large-scale factory, intelligent transportation, on-board system, airport port, oil depot, security department, prison, water conservancy and electric power, energy mining, ecological protection, administrative law enforcement, fishery and sea surveillance, border defense and other night vision monitoring fill light.

Statement：

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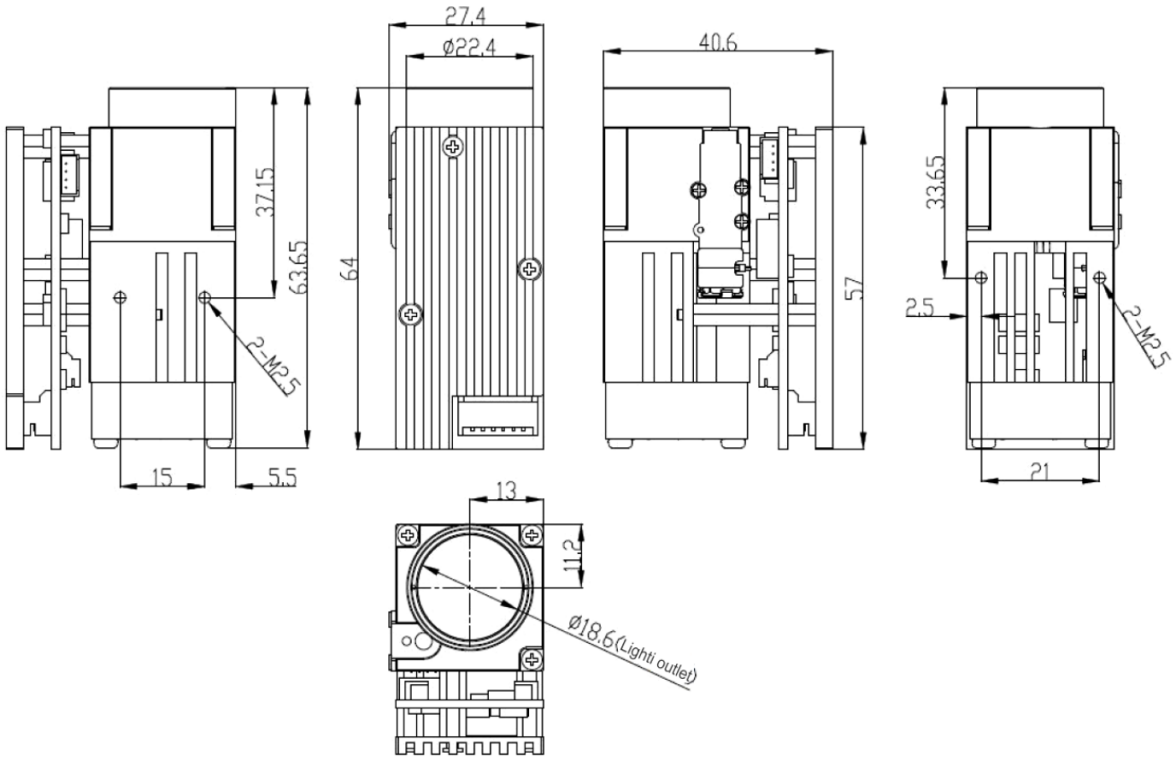
3KM Optoelectronics Technology Co., Ltd.		File Type： Specification
Prepared	LJJ	May 15, 2024
Review	Lzhj	May 15, 2024
Approve	wym	May 15, 2024

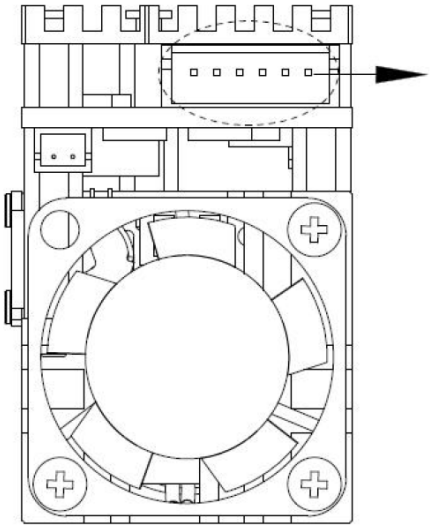
Optical and Electrical Parameters	
Item	**Parameters**
Size	L*W*H：64*27.4*40.6mm
Weight	≈65g
Input Voltage	DC 12V±10%
Input Current	1.2A±0.2A
Initialization Time	<2s
Consumed Power	≤17W
Output Optical Power（P_o）	3.8±0.3W
Center Laser Wavelength	850±10nm
Lighting Angle	2.0° ~ 70°(Continuous zoom)
Spot Diameter	φ28m(@2.0°,@ 800m), φ112m(@70°,@ 80m)
Longest Lighting Distance	≥800m
Communication Interface	RS-485/UART portTTL(Default: 9600bps)
Communication Protocol	Pelco_D
Operating Mode	Continuous Working Mode
Operating Life	> 20000H
Storage Temperature	-50℃~+100℃
Operating Temperature	-40℃~+85℃
Laser Safety Level	Class 3B （FDA、IEC）
Laser Safety Distance	≥15m(@2.0°, @$P_o$max)
Environmental Standards	ROHS 2.0

Product Size



unit: mm

Pin Definition



Connector Type: PH2.0*6P

From left to right	
1	12V
2	GND
3	TX
4	RX
5	485B
6	485A

Precautions

1.This product belongs to Class 3B invisible laser. When the laser light is on, it is strictly forbidden to use the eye to look back or use optical instruments to observe the laser beam.

2.Under normal use, it is forbidden to block flammable objects within 50cm in front of the lens to prevent fire.

3.During the use of this product, the product should be installed in a position that cannot be directly viewed by the human eye, or have a sufficient distance (>9m) from the position of the human eye. The manufacturer should flexibly select the radiation of the laser according to the monitored scene. Power to prevent damage to the human eye caused by the product.

4.When using the products of our company, the manufacturer should put a laser radiation warning label on the outside of the product.

5.If the manufacturer finds that the device is faulty during use, please send the product back to our company for repair. Do not disassemble it. After disassembly, no warranty will be made.

Contact Information

Company Name:	3KM Optoelectronics Technology Co., Ltd.
Business Phone:	+86-0755-6686 4401
Company website:	www.sz3km.cn
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