

300m VCSEL Array Laser Illuminator

LI-0860A-300M-02-65 / LI-0860M-300M-02-65

Features

- High performance VCSEL chip, no attenuation
- High efficiency up to 40% @ 25°C, >35% @ 50°C
- VCSEL chip, wide operating temperature -40~85°C
- VCSEL array chip with large emission area, good safety
- Motorized large dynamic beam angle zooming
- Illumination over 300m range
- High reliability, lifetime up to 50,000hrs
- Compact, easy to integrate
- TTL interface
- Negligible off-axis divergence, easy to collimate with camera lens
- Uniform beam intensity, speckle free
- Operating state memory
- CE certified
- Predefining position
- Low heat, high efficiency



Applications

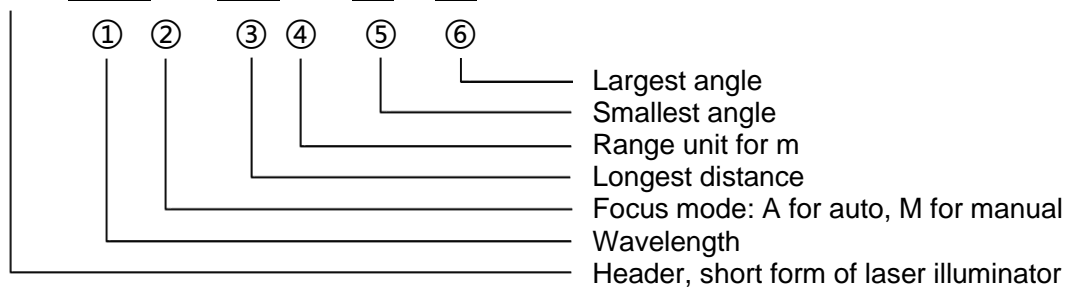
- Security surveillances
- Automobile night vision (ADAS)
- Machine vision
- Gesture recognition
- Display applications
- Military applications

PRODUCT IDENTIFY

Part Number	Description
LI-0860A-300M-02-65 / LI-0860M-300M-02-65	300m VCSEL Array Laser Illuminator

CODE RULES

e.g. LI - 0860A - 300M - 02 - 65



Description

This laser illuminator is high performance integrated with high quality laser chip and excellent optics design, and outstanding circuit control with high efficiency. It has big dynamic beam angle zooming, which can match the field view angle of cameras. It also has friendly interfaces such as operating voltage, communication protocol and installation schematic. It can be widely used in high-speed dome, PTZ camera and traffic monitoring.

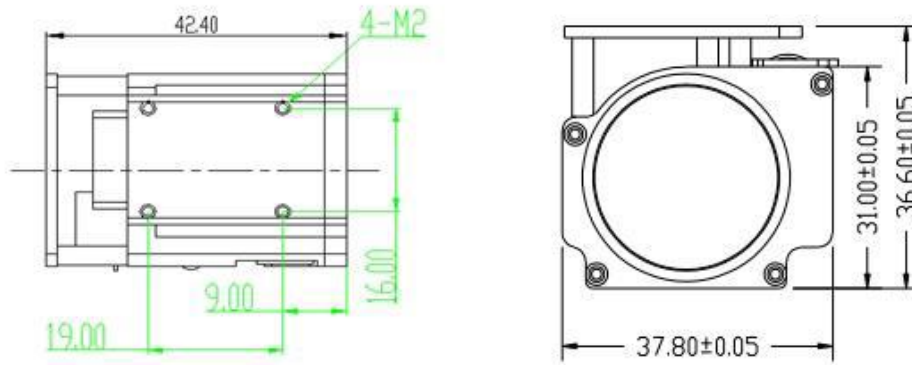
This illuminator is compatible with major lens and cameras, integrated with the protocols of Pelco D. It is easy for users to implement the illuminator. Simultaneously, position can be preset via serial port, and users can call the instruction to operate conveniently in use. Due to uniform power intensity of beam, users can obtain high quality video and easily recognize the features inside.

This product has two models: LI-0860A-300M-02-65 is auto focus, LI-0860M-300M-02-65 is manual focus. It is easy to match with auto and manual zoom lenses.

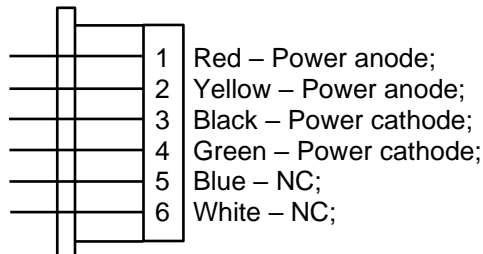
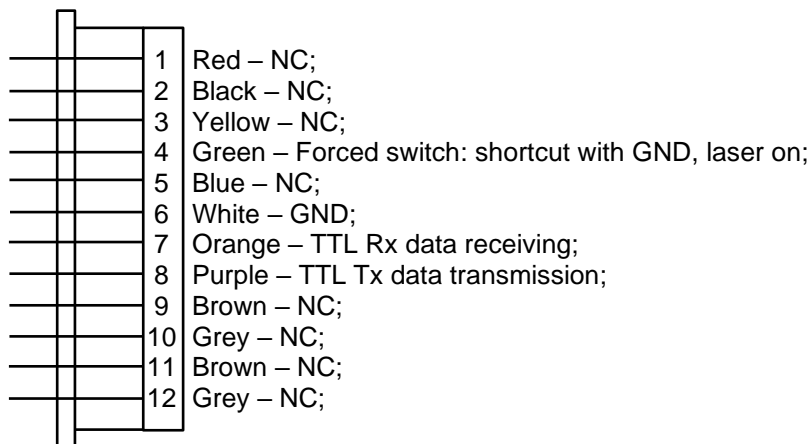
Specifications

Parameters	Typical values		Unit	Remarks
Model no.	LI-0860A-300M-02-65	LI-0860M-300M-02-65	-	
Laser mode	Multimode		-	
Wavelength	860±10		nm	
Optical power	1.2±0.1		W	@exit
Spot shape	Circular		-	
Illuminating distance	300	300	m	
Spot uniform	excellent		-	
Fan angle	2~65		°	±0.2°
Operating voltage	12		V	
Operating current	1		A	
Operating mode	CW		-	
Lifetime	50,000		hrs	
Operating temperature	-40~85		°	
Storage temperature	-40~85		°	
Power consumption	<12		W	
Dimensions	52(L)x38(W)x38(H)		mm	
Material	Alloy		-	
Surface color	Black		-	
Laser classification	Class 1		-	
Protocol interface	TTL		-	
Protocol	Pelco D		-	
Surface processing	Sandblasted black anodized		-	
Weight	100		g	
Heat dissipation	Forced wind		-	

Mechanical drawing



Electrical interface



Laser safety

The output power of this module is classified as Class IV, one can refer to IEC 60825-1:2014 “Laser Product Safety: Part 1: Devices classification, requirements and user’s manual”.

Copyright statement

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Revision history

Revision	Date	Description
V.01	2020/01/03	The first official edition