

IR VCSEL Array Laser Illuminators

LL1200-0365-850CXA

Features

- Self-developed high performance VCSEL chip, no attenuation
- High efficiency up to 40% @25°C, >35% @ 50°C
- VCSEL chip, wide operating temperature -40-+70°C
- VCSEL array chip with large emission area, good safety
- Self-developed high performance VCSEL chip, no attenuation
- Continuous beam angle zooming electrically and manually
- Illumination over 300m range
- High reliability, lifetime up to 50000hrs
- 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 certificate
- Presetting position
- Low heat, high efficiency



Applications

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

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 video security surveillances, machining vision, gesture recognition, display control, laser medicine and military applications.

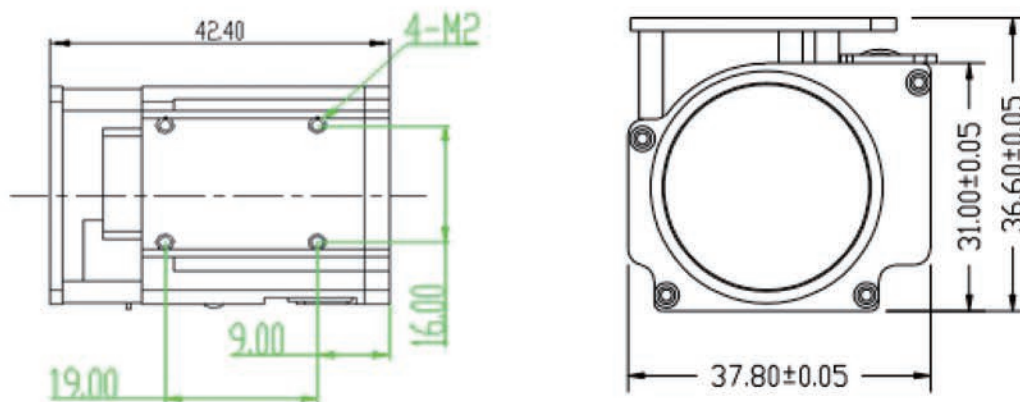
This illuminator is compatible with major lens and cameras, integrated with the protocols of Pelco D. It is easy for users to implement the illuminator. Simultaneously, Position can be preset via serial port, and users can call the instruction to operate conveniently in use. Due to uniform power intensity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

Specifications

Parameters	Typical values		Unit	Remarks
Model no.	LL1200-0365-850CAA	LL1200-0365-850CMA		

Zoom mode	Electrically motorized	Manually		
Laser mode	Mutimode		—	
Wavelength	850±10		nm	
Optical power	1.0±0.1		W	@exit
Spot shape	Circular			
Illuminating distance	200		m	
Spot uniform	excellent			
Fan angle	2.85-65		°	±0.2°
Operating voltage	12V			
Operating current	≤0.7		A	
Operating mode	CW			
Lifetime	50000		hrs	
Operating temperature	-40- +70		°	
Storage temperature	-40- +85		°	
Power consumption	<10		w	
Dimensions	52×38×38		mm	
Material	Alloy			
Surface color	Black		-	
Laser classification	Class 3			Staring time≤10s
Control A/Tx	Refer to Manual			
Control B/Rx	Refer to Manual			
Control cathode	Refer to Manual			
Power anode	Refer to Manual			
Power cathode	Refer to Manual			
Protocol interface	TTL			
Protocol	QLINK protocol/Pelco P&D			
Surface processing	-			
Weight	85		g	
Heat dissipation	Forced wind			

Mechanic schematic



Laser Safety

The output power of this module is classified as class III, one can refer to IEC 60825-1:2014 《Laser Product Safety: Part 1:Devices classification, requirements and user' s Manual》 .

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