

CR/ G/ B-II Series Line Laser

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The laser is made features of low noise, high straightness, perfect line uniformity and high stability to adapt to various environments.

The user can choose from red, green, blue, violet wavelengths depending on the application and material to be inspected.

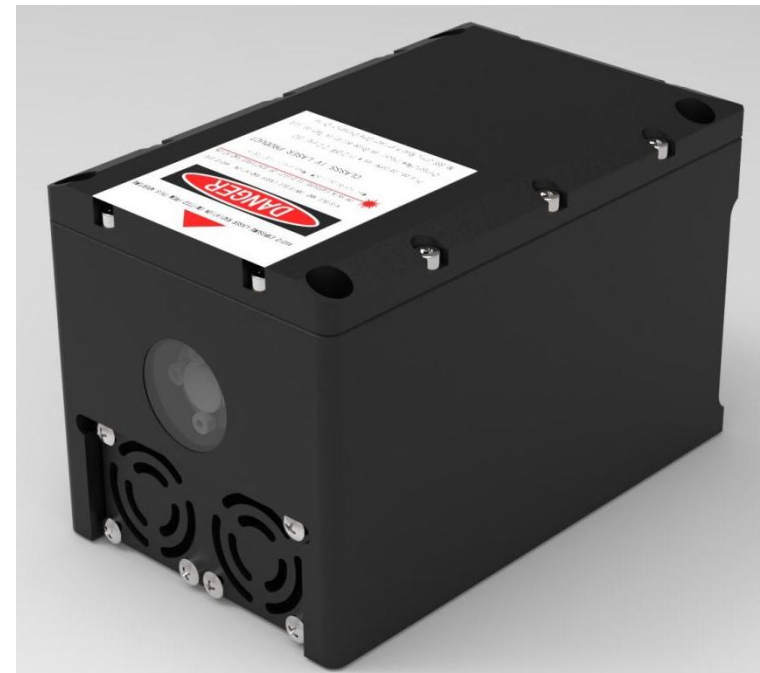
CR/ G/B-II Series Line Laser with its stable performance, high reliability works professionally in road detection, railway detection, tunnel and high-speed rail detection, etc.

APPLICATIONS

- Road detection
- Railway detection
- Tunnel detection
- High-speed rail detection

FEATURES

- Output power up to 2W
- Wavelengths from 405 to 660nm
- Digital-Modulation up to 500kHz
- RMS (20 Hz to 20 MHz) < 0.3 %



SYSTEM SPECIFICATION*

Wavelength	nm	405nm	450nm	520nm	640nm	660nm
Wavelength tolerance	nm (typical)	±5nm	±10nm	±10nm	±5nm	±5nm
Wavelength shift	nm	<1nm				
Output power	mW	≤2000mW	≤2500mW	≤1300mW	≤1500mW	≤2000mW
RMS noise	(20 Hz to 20 MHz)	<0.3%				
Alignment	mrad	<1mrad				
Directional stability varying with temperature	μrad/ K	<8μrad				
Beam height from base plate	mm	37mm				
Power stability	(24h)	<0.5%				
Warm-up time	min	<2min				
Power difference between high and low temperature	%	<5%				

ELECTRICAL SPECIFICATION*

Operation voltage		12-24VDC
Operation current		<4A
Protect		Over-temperature protection、anti-reverse connection and transient protection (ESD, impact and surge)
Power dissipation		<40W

OPTICAL SPECIFICATION*

Line angle	°	5°, 10°, 20°, 30°, 45°, 60°, 75°, 90°
Straightness	%	< 0.1 % (typ. 0,05%)
Nonuniformity	% (typ.)	<10%
Range of focus	%	<10%

Digital-Modulation

Maximum frequency	500kHz
Rise time	<1us
Fall time	<350ns
Signal level	VIL_max<+1.1V VIH_min<+2.5V

Analog Modulation

Operating specification	0-3VDC
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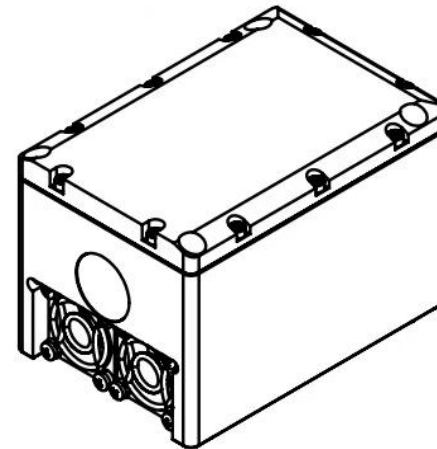
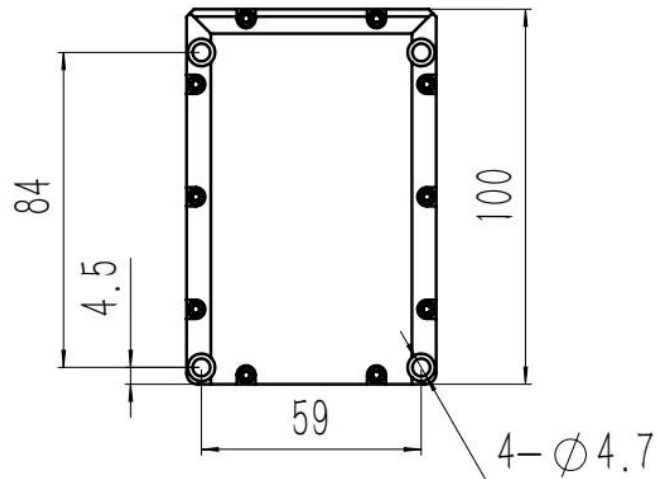
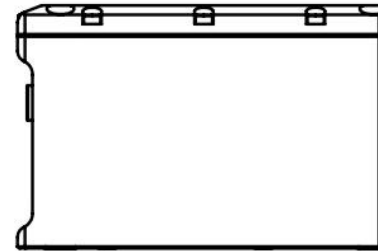
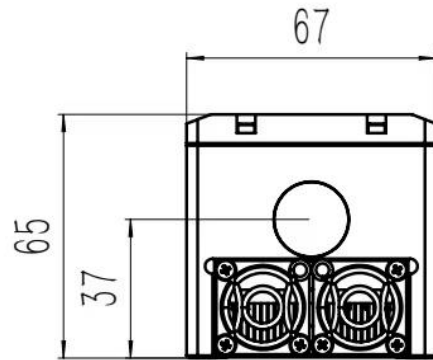
Environmental conditions

Operating temperature	°C	-20°C~+50°C
Storage temperature	°C	-40°C~+85°C
Humidity	%	<90%, No condensation

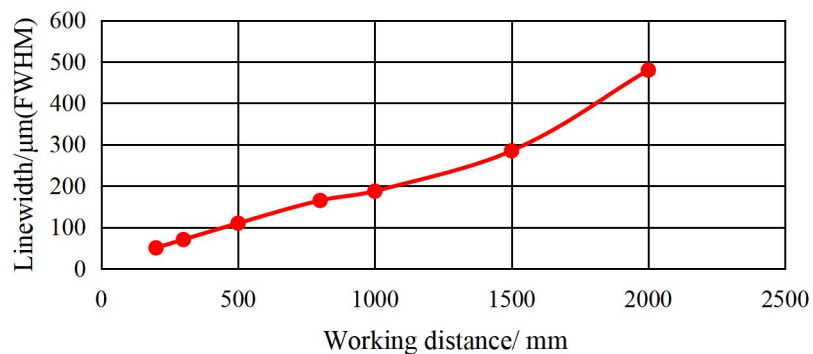
Machinery specification

Weight	kg	≤1kg
Size	mm	100×67×65mm ³
Protection class		IP67
Install		4×M3 screw

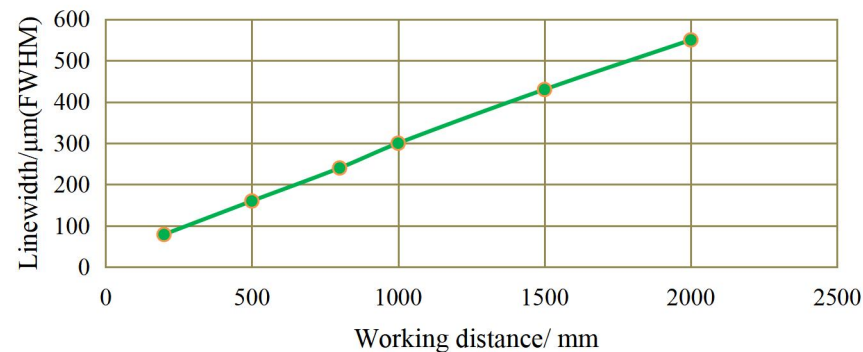
Dimension of Laser



Red laser linewidth-working distance curve



Green laser linewidth-working distance curve



Blue laser linewidth-working distance curve

