Erbium-Doped Glass Laser

Lumispot Tech OEM Laser Ranging Solution

Lumispot

Our Erbium-Doped Glass Laser, also known as the 1535nm Eye-Safe Er Glass Laser, excels in rangefinder module. Our laser uses co-doped Er:Yb phosphate glass and a semiconductor laser pump source to produce a 1.5um wavelength, making it perfect for Lidar, Ranging, and Communications.

01 **Eye-safe Laser**
1535nm wavelength

02 **High Output Power**
up to 1mJ

03 **Light-Weight**
< 10g

04 **Customization**
ouput power, Divergency angle

05 **Temp. Tolerance**
-40°C to + 65°C

06 **High Stability**
< 5%

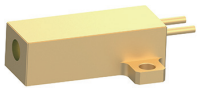
Laser Lidar

Laser Ranging

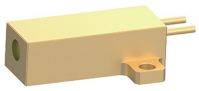
Laser Communication

Erbium-Doped Glass Laser

Technical Datasheet - LM-1535-PXXX-AX



LME-1535-P100-C9-0001



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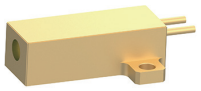
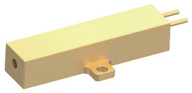
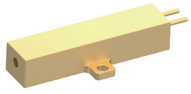


LME-1535-P300-C10-0001

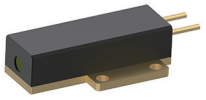
Item		Unit	Parameter		
Optical	Wavelength	nm	1535±5	1535±5	11535±5
	Pulse width (FWHM)	ns	3~6	3~6	3~6
	Pulse energy	μJ	≥100	≥200	≥300
	Re-frequency	Hz	1~10	1~10	1~10
	Beam quality	(M2)	≤1.3	≤1.3	≤1.3
	Light spot (1/e2)	mm	0.2	0.2	0.2
	Beam divergency	mrad	≤10	≤10	≤10
LD electricity	Working voltage	V	＜2	＜2	＜2
parameter	Working current	A	6	10	12
	Pulse width	ms	≤2.5	≤2.5	≤2.5
Others	Working temperature	℃	-45~+70	-45~+70	-45~+70
	Storage temperature	℃	-50~+75	-50~+75	-50~+75
	Lifetime	-	>10^7 times	>10^7 times	>10^7 times
	Weight	g	9	9	9



LME-1535-P400-C11-0001



LME-1535-P500-C11-0001



LME-1535-P40-A10-5000

Item		Unit	Parameter		
Optical	Wavelength	nm	1535±5	1535±5	1535±5
	Pulse width (FWHM)	ns	3~6	3~6	3~6
	Pulse energy	μJ	≥400	≥500	≥40
	Energy stability	%	-	-	＜4
	Re-frequency	Hz	1~10	1~10	1000
	Beam quality	(M2)	≤1.3	≤1.3	≤1.5
	Light spot (1/e2)	mm	0.3	0.3	0.3
	Beam divergency	mrad	≤15	≤15	≤15
LD electricity	Working voltage	V	＜2	＜2	＜2
parameter	Working current	A	15	18	4
	Pulse width	ms	≤2.5	≤2.5	≤0.4
Others	Working temperature	℃	-40~+65	-40~+65	-40~+65
	Storage temperature	℃	-50~+75	-50~+75	-50~+75
	Lifetime	-	>10^7 times	>10^7 times	>10^7 times
	Weight	g	15	15	12

- Anti-static measures must be taken during transportation, storage and use.
- Laser diode pins need to be connected to a short route protection.
- Use constant current power supply to avoid peak and surge during operation.
- Laser operating temperature, frequency, pulse width, current is strictly prohibited to exceed the specification of the range.
- Laser work to ensure reliable installation.
- Laser window to ensure clean and pollution-free, so as not to cause light abnormalities.

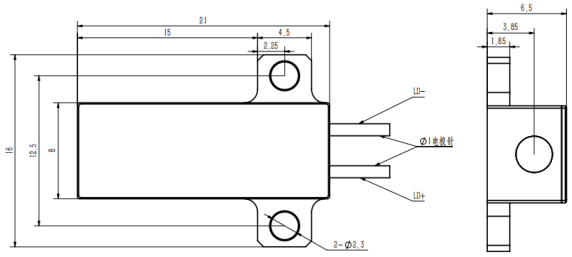
Erbium-Doped Glass Laser

Dimensional Graph for A stage

LME-1535-P100-C9-0001

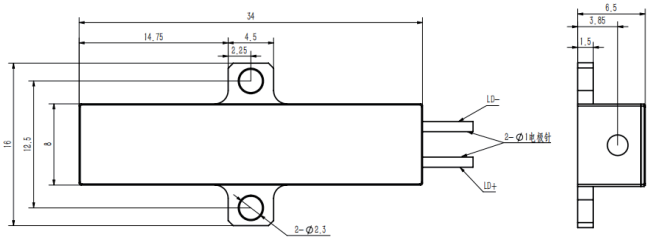
LME-1535-P200-C9-0001

LME-1535-P300-C10-0001

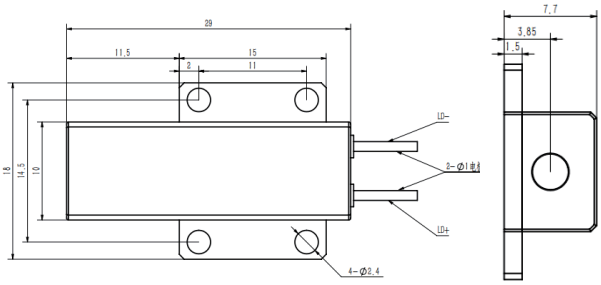


LME-1535-P400-C11-0001

LME-1535-P500-C11-0001



LME-1535-P40-A10-5000



FEATURES

- Eye-safe Laser
- Mini size
- High peak power
- Strong environmental adaptability

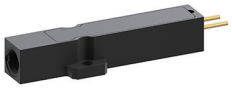
Application scenarios

- Laser ranging
- Laser radar
- Laser communication
- Spectral analysis

Erbium-Doped Glass Laser

Technical Datasheet - LM-1535-PXXX-AX

LME-1535-P40-A6-5200



LME-1535-P100-A8-0200

Item		Unit	Parameter	
Optical	Wavelength	nm	1535±5	1535±5
	Pulse width (FWHM)	ns	3~6	3~6
	Pulse energy	μJ	≥40	≥100
	Energy stability	%	-	＜8
	Re-frequency	Hz	1000	10
	Beam quality	(M2)	≤1.5	≤1.3
	Light spot (1/e2)	mm	≤13	0.2
	Beam divergency	mrad	0.5~0.6	≤0.6
LD electricity	Working voltage	V	＜2	＜2
parameter	Working current	A	4	6
	Pulse width	ms	≤0.4	1.0-2.5
Others	Working temperature	℃	-40~+65	-40~+65
	Storage temperature	℃	-50~+75	-50~+75
	Lifetime	-	>10^7 times	>10^7 times
	Weight	g	30	10

- Anti-static measures must be taken during transportation, storage and use.
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- Use constant current power supply to avoid peak and surge during operation.
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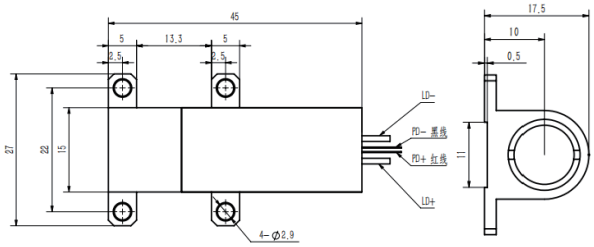
Dimensional Graph for A stage



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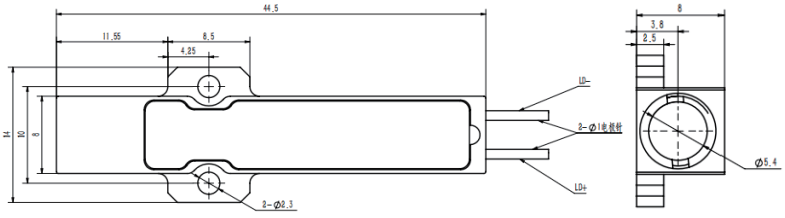

LME-1535-P100-A8-0200

FEATURES

Eye-safe Laser

Mini size

High peak power

Strong environmental adaptability

Application scenarios

Laser ranging

Laser radar

Laser communication

Spectral analysis

Lumíspot

¥78million	9+	90%	200+
Register Capital	Ph.D	Proportion of Talent	Patents

Lumispot was founded in 2010, with its headquarters in Wuxi, boasts a registered capital of CNY 78.55 million. Our expansive facility covers an area of approximately 40,000 square meters and is powered by a dedicated team of over 500 employees. Over the past 14+ years, Lumispot has emerged as a frontrunner in the specialized field of laser information technology, underpinned by a robust technical foundation.

We specialize in the research and development of laser technology, providing a diverse portfolio of products.This range encompasses laser ranging module, laser rangefinder, laser pump source, semiconductor laser, fiber laser,and solid-state laser, as well as comprehensive systems including structured lasers, and dazzlers. Our products find extensive applications across various sectors such as defense and security, LiDAR systems, remote sensing, inertial navigation, and technical research.

Lumispot is recognized as a National High-tech Enterprise and a National Innovation Enterprise, a testament to our commitment to innovation and excellence. This is further evidenced by our impressive portfolio of over 200 patents, marking our significant contributions to the field of laser technology.

Contact

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