

Erbium-Doped Glass Laser

Lumispot Tech OEM Laser Ranging Solution



Our Erbium-Doped Glass Laser, also known as the 1535nm Eye-Safe Er Glass Laser, excels in range-finder 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

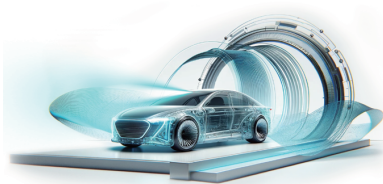
02 High Output Power
up to 1mJ

03 Light-Weight
<10g

04 Customization
output power, Divergency angle

05 Temp. Tolerance
-40°C to + 65°C

06 High Stability
< 5%



Laser LIDAR



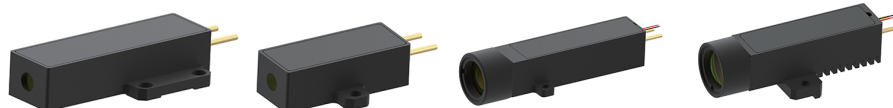
Laser Ranging



Laser Communication

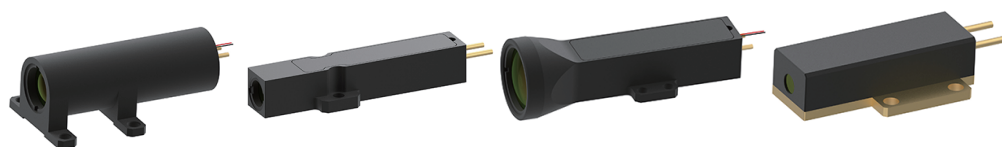
Erbium-Doped Glass Laser

Technical Datasheet - LM-1535-PXXX-AX



LM-1535-Pxxx-A1 LM-1535-Pxxx-A3 LM-1535-Pxxx-A4 LM-1535-Pxxx-A5

Wavelength / nm	1535	1535	1535	1535
Pulsed Width(FWHM) / ns	3-6	3-6	3-6	3-6
Pulsed Energy / uJ	200/300/400	100/200	200/300/400	100/200
Peak Power / kW	50/65/80	25/50	50/65/80	25/50
Energy Stability / %	≤5	≤5	≤5	≤5
Divergence angle /mrad	≤12	≤12	≤0.5	≤0.5
Operating voltage / V	<2	<2	<2	<2
Operating current / A	12/14/15	6/12	12/14/15	6/12
Operating frequency/ Hz	1-10	1-10	1-10	1-10
Pulse width/ ms	1.0-2.5	1.0-2.5	1.0-2.5	1.0-2.5
Operating Temp./ °C	-40-65	-40-65	-40-65	-40-65
Storaging Temp./ °C	-50-75	-50-75	-50-75	-50-75
Lifespan/ times	10,000,000	10,000,000	10,000,000	10,000,000
Weight/ g	<10	<10	<20	<20

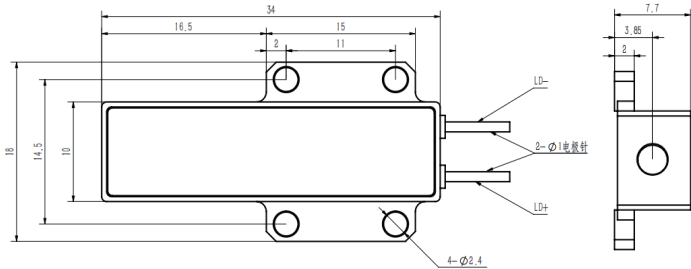


LM-1535-Pxxx-A6 LM-1535-Pxxx-A8 LM-1535-Pxxx-A9 LM-1535-Pxxx-A10

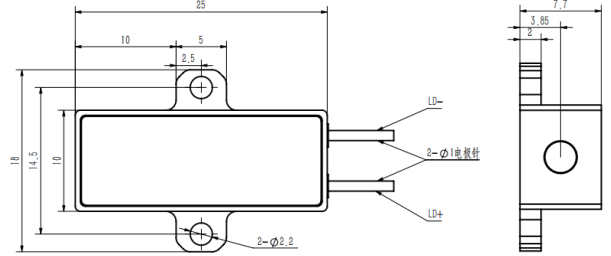
Wavelength / nm	1535	1535	1535	1535
Pulsed Width(FWHM) / ns	3-6	3-6	3-6	3-6
Pulsed Energy / uJ	40	100/200	300	40
Peak Power / kW	10	25/50	65	10
Energy Stability / %	≤5	≤5	≤5	≤5
Divergence angle /mrad	0.5±0.1	≤0.5	≤0.3	≤15
Operating voltage / V	<2	<2	<2	2
Operating current / A	4	6/12	14	4
Operating frequency/ Hz	1000	10	10	1000
Pulse width/ ms	0.2-0.4	1.0-2.5	1.0-2.5	0.2-0.4
Operating Temp./ °C	-40-65	-40-65	-40-65	-40-65
Storaging Temp./ °C	-50-75	-50-75	-50-75	-50-75
Lifespan/ times	10,000,000	10,000,000	10,000,000	10,000,000
Weight/ g	<20	<20	<15	<10

Erbium-Doped Glass Laser

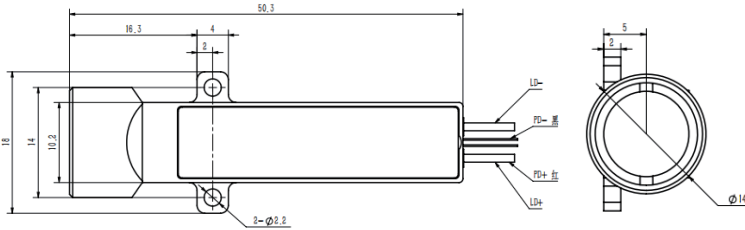
Dimensional Graph for A stage



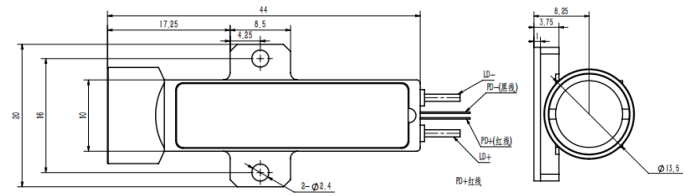
LM-1535-Pxxx-A1



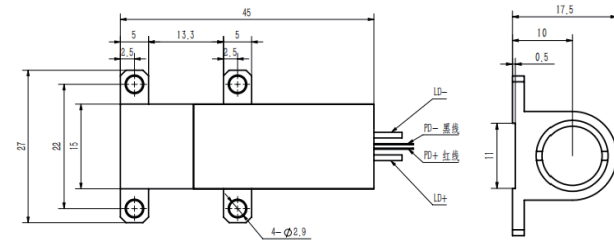
LM-1535-Pxxx-A3



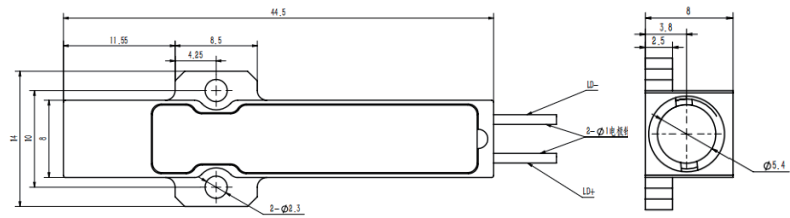
LM-1535-Pxxx-A4



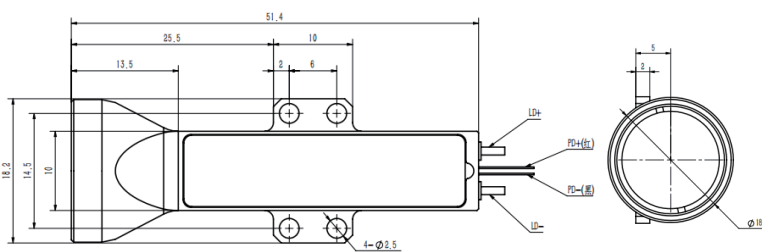
LM-1535-Pxxx-A5



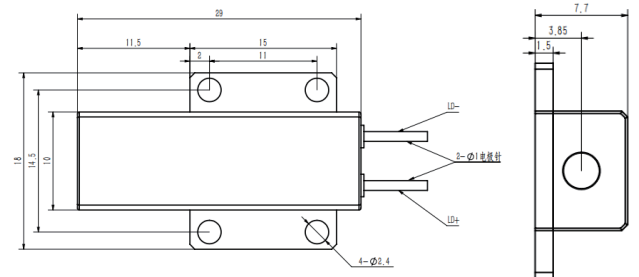
LM-1535-Pxxx-A6



LM-1535-Pxxx-A8



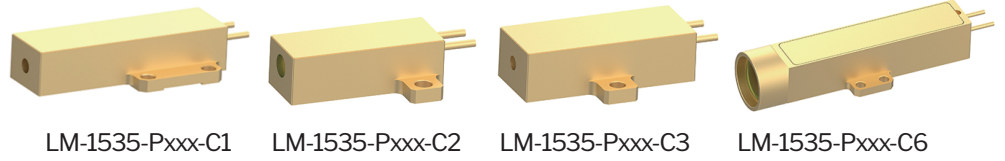
LM-1535-Pxxx-A9



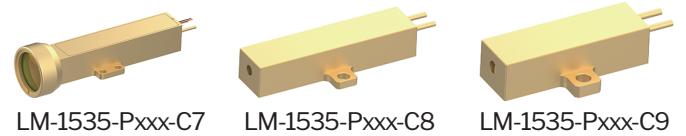
LM-1535-Pxxx-A10

Erbium-Doped Glass Laser

Technical Datasheet - LM-1535-Pxxx-Cx



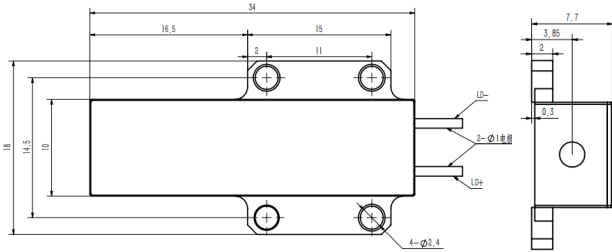
	LM-1535-Pxxx-C1	LM-1535-Pxxx-C2	LM-1535-Pxxx-C3	LM-1535-Pxxx-C6
Wavelength / nm	1535	1535	1535	1535
Pulsed Width(FWHM) / ns	3-6	3-6	3-6	3-6
Pulsed Energy / uJ	400/500	40	100/200	300/400
Peak Power / kW	80/100	10	25/50	65/80
Energy Stability / %	≤5	≤5	≤5	≤5
Divergence angle /mrad	≤15	≤15	≤12	≤0.5
Operating voltage / V	2	2	2	2
Operating current / A	15/18	4	6/12	14/16
Operating frequency/ Hz	1-10	1000	1-10	1-10
Pulse width/ ms	1.0-2.5	0.2-0.4	1.0-2.5	1.0-2.5
Operating Temp./ °C	-40-65	-40-65	-40-75	-40-65
Storing Temp./ °C	-50-75	-50-75	-50-75	-50-75
Lifespan/ times	10,000,000	10,000,000	10,000,000	10,000,000
Weight/ g	<20	<10	<15	<30



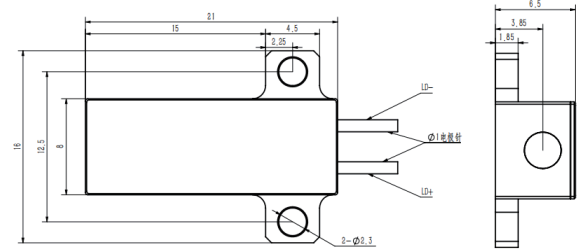
	LM-1535-Pxxx-C7	LM-1535-Pxxx-C8	LM-1535-Pxxx-C9
Wavelength / nm	1535	1535	1535
Pulsed Width(FWHM) / ns	3-6	3-6	3-6
Pulsed Energy / uJ	400/500	400/500	100/200/300
Peak Power / kW	80/100	80/100	25/50/65
Energy Stability / %	≤5	≤5	≤5
Divergence angle /mrad	≤0.5	≤15	≤12
Operating voltage / V	2	2	2
Operating current / A	15/18	15/18	6/12/14
Operating frequency/ Hz	1-10	1-10	10
Pulse width/ ms	1.0-2.5	1.0-2.5	1.0-2.5
Operating Temp./ °C	-40-65	-40-75	-40-65
Storing Temp./ °C	-50-75	-50-75	-50-75
Lifespan/ times	10,000,000	10,000,000	10,000,000
Weight/ g	<30	<20	<15

Erbium-Doped Glass Laser

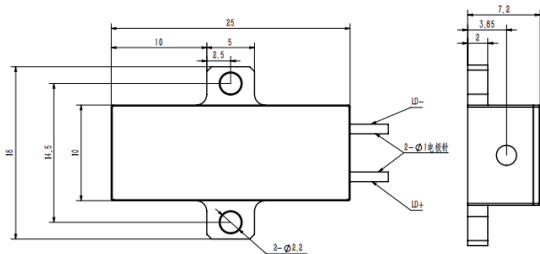
Dimensional Graph for C stage



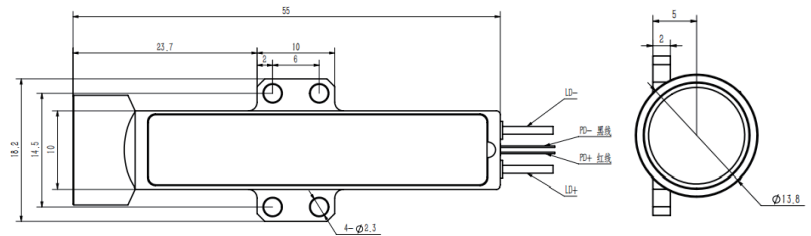
LM-1535-Pxxx-C1



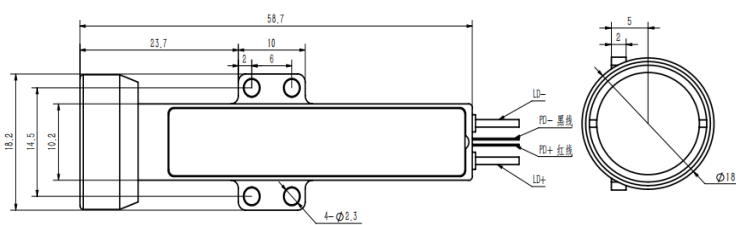
LM-1535-Pxxx-C2



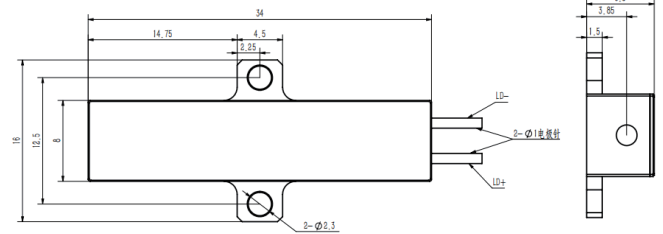
LM-1535-Pxxx-C3



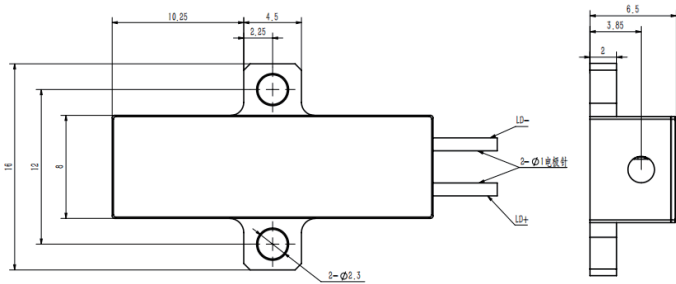
LM-1535-Pxxx-C6



LM-1535-Pxxx-C7



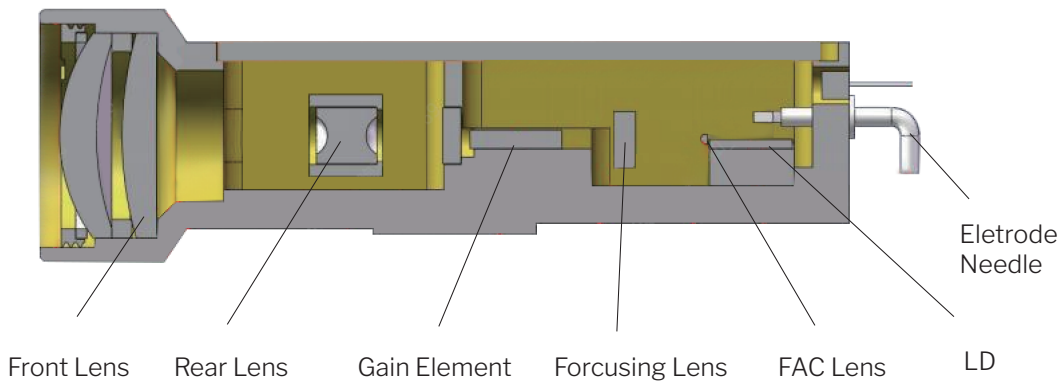
LM-1535-Pxxx-C8



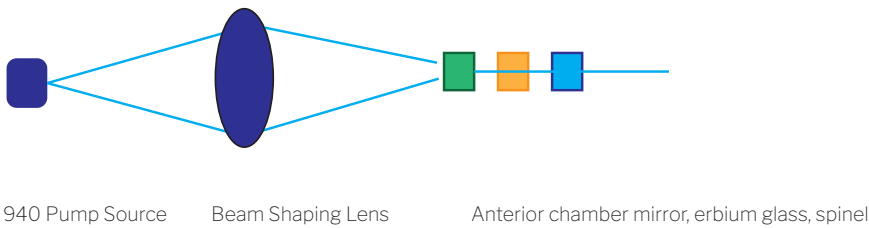
LM-1535-Pxxx-C9

Erbium-Doped Glass Laser

Structure & Primary Production Procedures



940nm laser pumping outputs 1535nm laser.

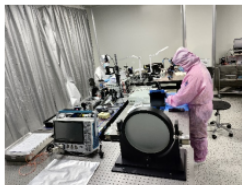


Primary Production Procedures

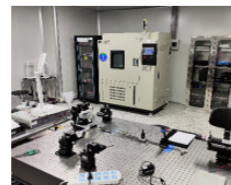
Undergoing rigorous pre-shipment quality testing



Surface Mount Technology



Test Process



Aging test/ Burn-in
Thermal Cycling Test.

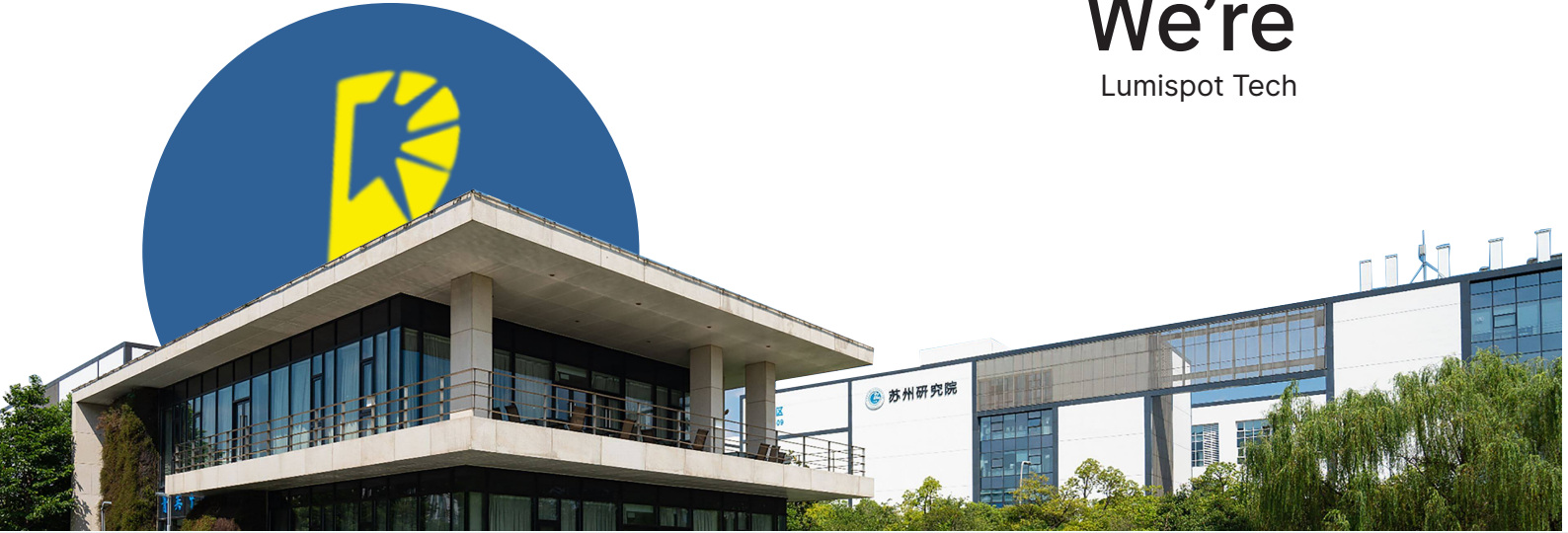
Precautions:

1. Anti-static measures must be taken during transportation, storage, and use.
2. Short-circuit lines should be connected between the pins of the laser diode for protection.
3. Use a constant current power supply and avoid peak and surge currents during operation.
4. The operating temperature, frequency, pulse width, and current of the laser must not exceed the ranges specified in the datasheet.
5. Ensure reliable installation when the laser is in operation.
6. Keep the laser window clean and free from contamination to prevent abnormal light emission.

Company Profile

About Lumispot

We're Lumispot Tech



¥78M

Register Capital CNY

6+

Ph.D.

80%

Proportion of Talents

150+

Patents



Located in Suzhou Industrial Park, **LumiSpot Technology Group** is a leader in laser technology with a strong foundation, having a registered capital of CNY 78.85 million and a large office and production area of about 14,000 square meters. We have expanded our reach with subsidiaries in Beijing (Lumimetric), Wuxi, and Taizhou.

Our expertise lies in laser information technology, offering a wide range of products including laser diode, fiber lasers, solid-state lasers, ranging modules, and various vision inspection systems. Recognized for our innovation, we've been named a High Power Laser Engineering Center and have received numerous awards and national research funding.

Contact

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- 2023 ●
- 2024 ●



Illuminate Future From Laser

We aim to become the global leader in laser special information domain.

