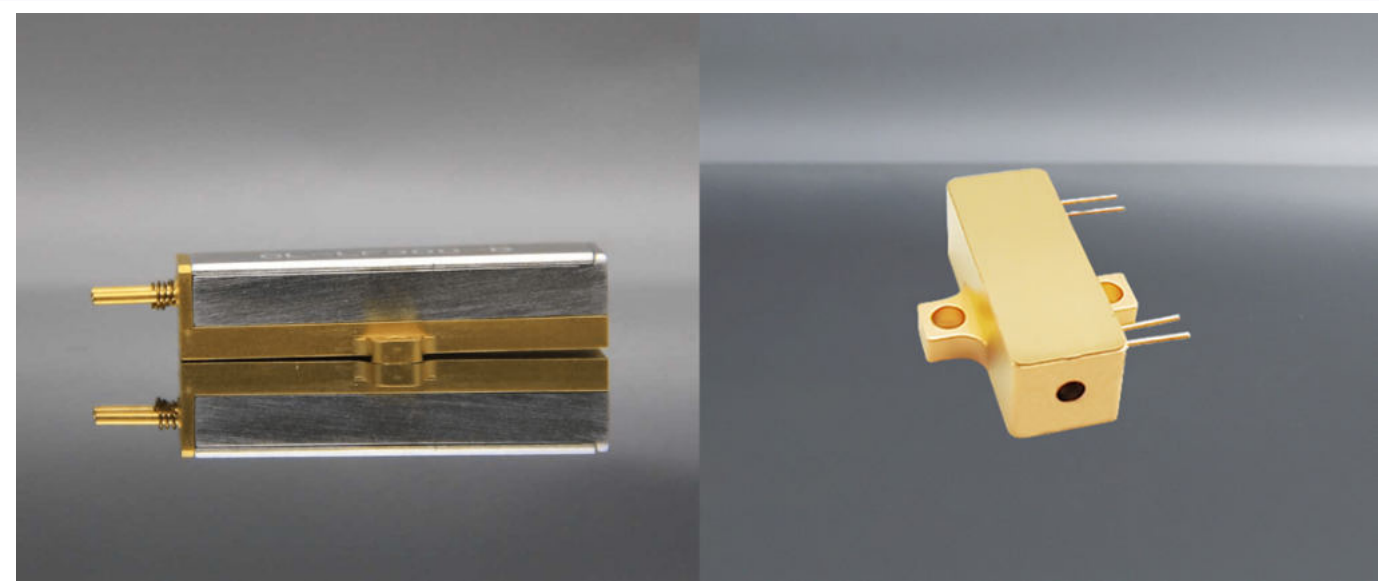


1535nm Eye Safe Laser

LOW / HIGH ENERGY 1535 LASER MODULE PRODUCT MODEL



Model	UL-LF100-B	UL-LF200-B	UL-LF300-B	UL-LF100-B-PIN*	UL-LF200-B-PIN*	UL-LF300-B-PIN*	UL-LF500-B	UL-LF1000-B
Wavelength	1535nm	1535nm	1535nm	1535nm	1535nm	1535nm	1535nm	1535nm
Output Energy	100μJ	200μJ	300μJ	100μJ	200μJ	300μJ	500μJ	1000μJ
Pulse Width	5ns	5ns	5ns	5ns	5ns	5ns	6ns	8ns
Repetition Rate	10Hz	10Hz	10Hz	10Hz	10Hz	10Hz	10Hz	5Hz
Divergence Angle	10mrad	10mrad	10mrad	10mrad	10mrad	8mrad	8mrad	7mrad
Beam mode	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀
Working Current	7A	10A	12A	8A	10A	12A	20A	30A
Weight	7g	10g	12g	8g	8g	10g	13g	20g
Size	21x8x7mm ³	21x8x7mm ³	25x8x7mm ³	21x8x7mm ³	21x8x7mm ³	25x8x7mm ³	32x8x7mm ³	40x9x7.7mm ³
Working Temperature Range	-40°C~+65°C	-40°C~+65°C	-40°C~+65°C	-40°C~+65°C	-40°C~+65°C	-40°C~+65°C	-40°C~+65°C	-40°C~+65°C
Storage Temperature Range	-55°C~+80°C	-55°C~+80°C	-55°C~+80°C	-55°C~+80°C	-55°C~+80°C	-55°C~+80°C	-55°C~+80°C	-55°C~+80°C

Note: *This model has a built-in PIN, and the PIN amplitude is 2-3V@50Ω impedance

DESCRIPTION

1535 nm laser is one of the series of solid state laser provided by ULaser. It is based on the bonding crystal of Er: glass and Co: Spinel. It's a good erbium laser. Due to our mature bonding and packaging technology, our 1535 nm laser also can be called as 1535 nm microchip laser.

The most important advantage of our 1535 nm laser is its safety to users' eyes. Because there is higher access of human eyes to 1535 nm laser than other lasers (like 1064 nm Nd:YAG laser). Besides, our 1535 nm laser can provide large pulsed laser energy up to 400 uJ. And lighter weight and smaller size are its other brightened spots.

Our 1535 nm laser has wide applications in infra red scope. It can be used as light source in lightweight lidar sensor, as well as in laser range finder.

FEATURES

- The laser pulse width can reach 5ns
- Maximum PRF to 1kHz
- Pulse energy up to 400μJ

APPLICATIONS

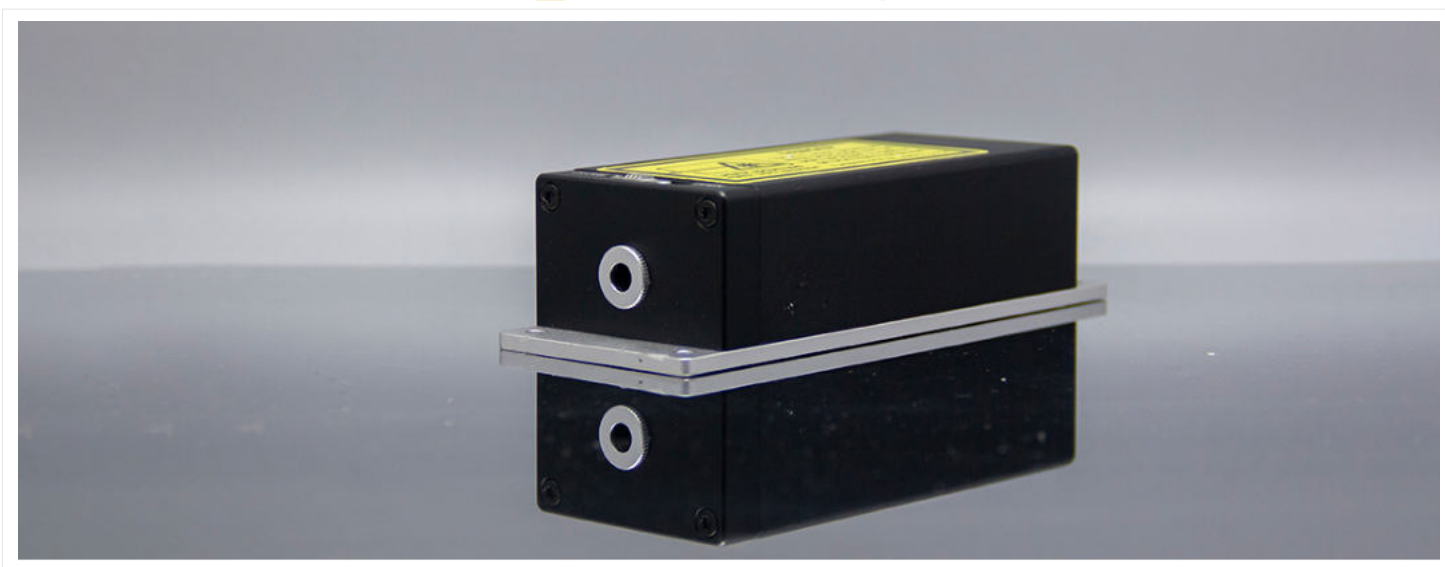
- Laser Ranging
- Lidar

HIGH REPETITION 1535 LASER MODULE PRODUCT MODEL

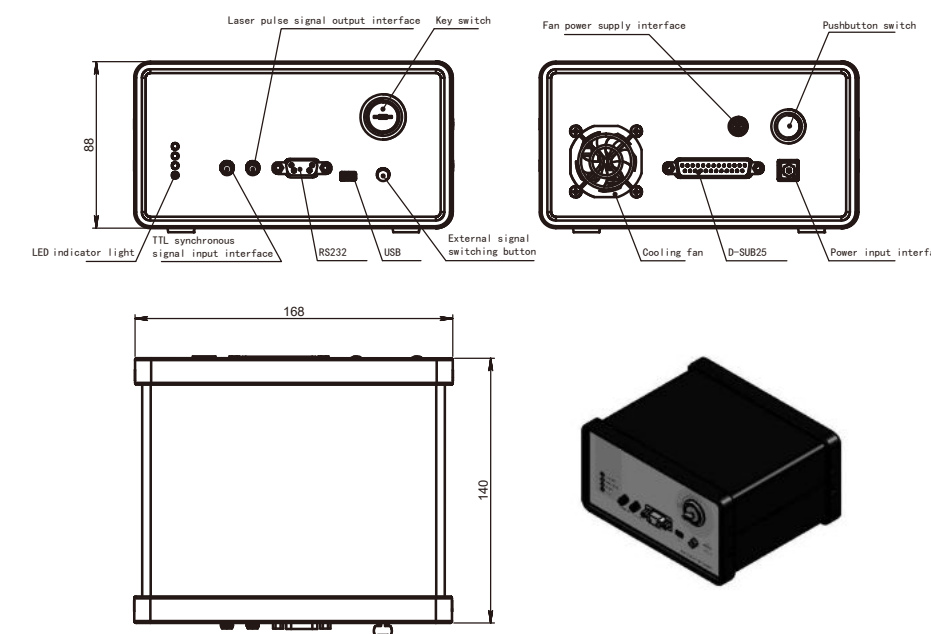
Model	UL-HF40-B	UL-HF20-B	UL-HF10-B	UL-HF5-B	UL-HF40-B-PIN*	UL-HF20-B-PIN*	UL-HF10-B-PIN*	UL-HF5-B-PIN*
Wavelength	1535nm	1535nm	1535nm	1535nm	1535nm	1535nm	1535nm	1535nm
Output Energy	40μJ	20μJ	10μJ	5μJ	40μJ	20μJ	10μJ	5μJ
Pulse Width	5ns	6ns	8ns	10ns	5ns	6ns	8ns	10ns
Repetition Rate	1KHz	2.5KHz	5KHz	10KHz	1KHz	2.5KHz	5KHz	10KHz
Divergence Angle	16mrad	17mrad	18mrad	20mrad	16mrad	17mrad	18mrad	20mrad
Working voltage	2V	2V	2V	2V	-	-	-	-
Spot diameter	0.3mm	0.3mm	0.3mm	0.3mm	-	-	-	-
Directivity	<0.2°	<0.2°	<0.2°	<0.2°	-	-	-	-
Beam mode	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀
Working Current	5A	5A	5A	5A	5A	5A	5A	5A
Weight	≤10g	≤10g	≤10g	≤10g	7g	7g	7g	7g
Size	21x8x7mm ³	21x8x7mm ³	21x8x7mm ³	21x8x7mm ³	21x8x7mm ³	21x8x7mm ³	21x8x7mm ³	21x8x7mm ³
Working Temperature Range	-40°C~+65°C	-40°C~+65°C	-40°C~+65°C	-40°C~+65°C	-40°C~+65°C	-40°C~+65°C	-40°C~+65°C	-40°C~+65°C
Storage Temperature Range	-55°C~+80°C	-55°C~+80°C	-55°C~+80°C	-55°C~+80°C	-55°C~+80°C	-55°C~+80°C	-55°C~+80°C	-55°C~+80°C

Note: *This model has a built-in PIN, and the PIN amplitude is 2V@50Ω impedance

1535nm Er:glass Q-switched nanosecond laser MF Microchip laser system



OUTLINE SIZE(mm)



DESCRIPTION

1535nm laser is one of the series of solid state laser provided by ULaser. It is based on the bonding crystal of Er:Glass and Co:Spinel. It's a good erbium laser. Due to our mature bonding and packaging technology, our 1535nm laser also can be called as 1535nm microchip laser.

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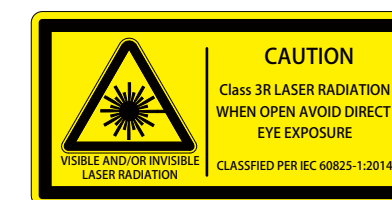
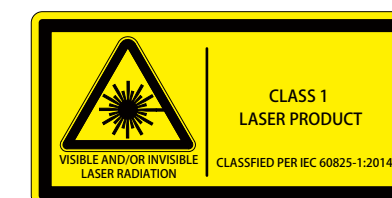
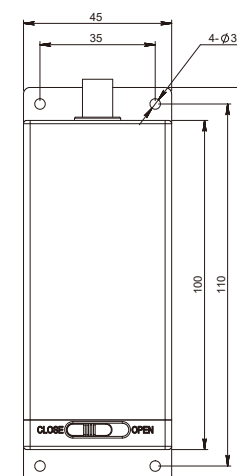
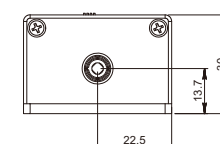
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FEATURES

- The laser pulse width can reach 5ns
- Maximum PRF to 1kHz
- Pulse energy up to 400μJ

APPLICATIONS

- laser ranging
- Lidar



PARAMETERS

Model	UL1535-0.01kHz-100μJ-MF001	UL1535-0.01kHz-200μJ-MF002	UL1535-0.01kHz-300μJ-MF003	UL1535-0.01kHz-500μJ-MF004	UL1535-0.005kHz-1000μJ-MF005	UL1535-1kHz-40μJ-MF006	UL1535-2.5kHz-20μJ-MF007	UL1535-5kHz-10μJ-MF008	UL1535-10kHz-5μJ-MF009
Wavelength (nm)	1535	1535	1535	1535	1535	1535	1535	1535	1535
Repetition Frequency (KHz)	0.01	0.01	0.01	0.01	0.005	1	2.5	5	10
Output Energy(μJ)	100	200	300	500	1000	40	20	10	5
Pulse Width (ns)	5	5	5	6	8	5	6	8	10
Power Stability (8h)	3%	3%	3%	3%	3%	3%	3%	3%	3%
Beam Mode	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀	TEM ₀₀
Full-angle Divergence Angle Typ. (Mrad) Level @ 1/e ²	10	10	10	8	7	16	17	18	20
Vertical @ 1 / e ²	10	10	10	8	7	16	17	18	20
System Power Consumption (W)	≤3	≤3	≤3	≤7	≤7	≤7	≤7	≤7	≤7
Power Input	100-240 VAC, 50/60Hz	100-240 VAC, 50/60Hz	100-240 VAC, 50/60Hz	100-240 VAC, 50/60Hz	100-240 VAC, 50/60Hz	100-240 VAC, 50/60Hz	100-240 VAC, 50/60Hz	100-240 VAC, 50/60Hz	100-240 VAC, 50/60Hz
Modulation Input	TTL0-5V, SMA interface	TTL0-5V, SMA interface	TTL0-5V, SMA interface	TTL0-5V, SMA interface	TTL0-5V, SMA interface	TTL0-5V, SMA interface	TTL0-5V, SMA interface	TTL0-5V, SMA interface	TTL0-5V, SMA interface
Control Interface	RS232、USB	RS232、USB	RS232、USB	RS232、USB	RS232、USB	RS232、USB	RS232、USB	RS232、USB	RS232、USB
Power Supply Size (W × H × L, mm)	168×88×140	168×88×140	168×88×140	168×88×140	168×88×140	168×88×140	168×88×140	168×88×140	168×88×140
Laser Head Size (W × H × L, mm)	45×30×120	45×30×120	45×30×120	45×30×120	45×30×120	45×30×120	45×30×120	45×30×120	45×30×120
Working Temperature (°C)	15-35	15-35	15-35	15-35	15-35	15-35	15-35	15-35	15-35
Storage Temperature (°C)	0-60	0-60	0-60	0-60	0-60	0-60	0-60	0-60	0-60

