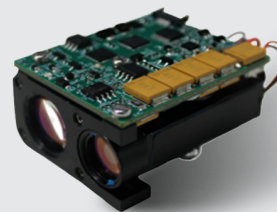


# 3 km Laser Rangefinder - 1535nm

**LSP-LRS-0310MS-01**

## Product Description:

The LSP-LRS-0310MS-01 Laser Rangefinder Module is developed based on the 1535nm erbium doped glass laser, belongs to the class 1 eye safe laser products. This product is single pulsed range finder, ranging more than 3 km (to 2.3\*2.3m vehicle) under the visibility over 6km.

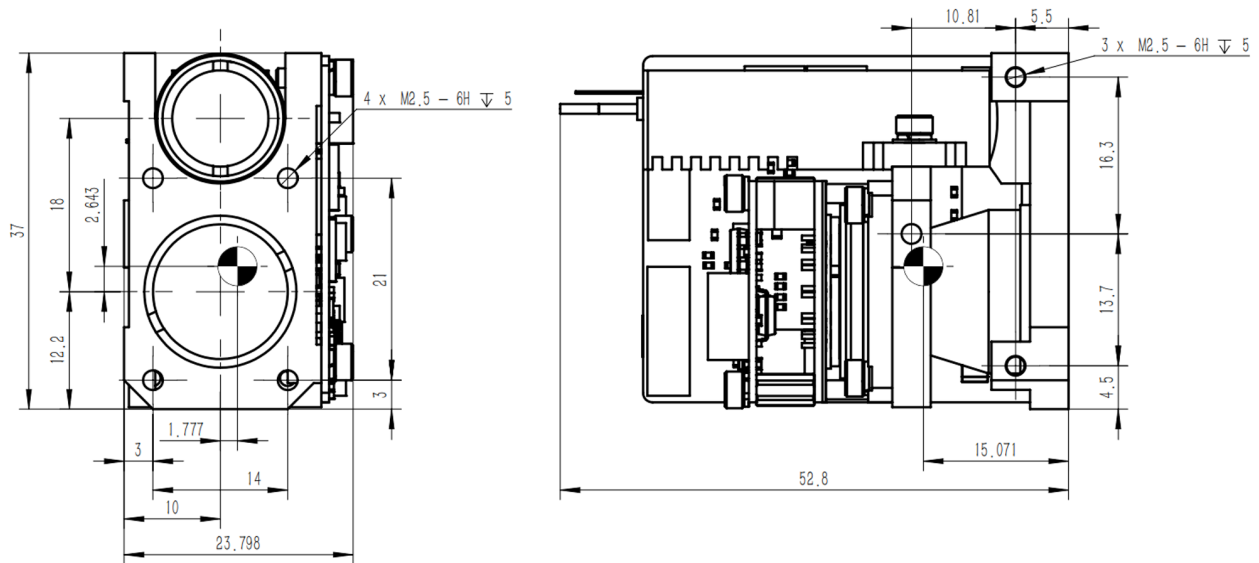


- Laser Ranging
- Targeting

## Technical Data

Parameters	Unit	LSP-LRS-0310MS-01
Wavelength	nm	1535±5
Main function		“a. Single ranging and continuous ranging b. Range gate, forward and aft target indication c. self-checking function”
Operating range		“≥3,000m” Visibility > 6km; objective: 2.3*2.3m; (reflectivity > 30%; humidity≤80%)”
Laser divergence angle	mrad	≤ 0.5
Continuous ranging frequency	Hz	1-10 (Adjustable)
Ranging accuracy	m	≤±2(RMS)
Accurate ranging ratio	%	≥98
Minimum range	m	≤20
Range resolution	m	≤30
Voltage supply	V	DC3 ~ 15 (Custmizable)
Weight	g	≤ 50
Power consumption	W	“Average ≤1.5W(@1Hz); Peak ≤5W”
Dimension	mm	≤53*37*24
Working temperature	°C	-40 ~ +60
Storage temperature	°C	-50 ~ +70
Communication interface		RS422, 115200bps

## Product Dimension



Size in mm

## Special Note

- 1.The laser emitted by this ranging module is 1535nm, which is safe for human eyes. However, it is recommended to avoid direct eye contact with the laser.
- 2.When adjusting the parallelism of the three optical axes, be sure to cover the receiving lens. Failure to do so may result in permanent damage to the detector due to excessive backscatter.
- 3.This ranging module is not airtight. It is essential to ensure that the relative humidity in the operating environment is less than 80% and that environment is clean and sanitary to prevent damage to laser.
- 4.The measurement range of the ranging module is related to atmospheric visibility and the nature of the target. Distance measurement may be reduced in foggy, rainy, or windy conditions. Targets such as clusters of green leaves, white walls, and exposed limestone have higher reflectivity, which can increase the measurement range. Additionally, increasing the angle at which the target intercepts the laser beam will decrease the measurement range.
5. It is strictly forbidden to emit laser beams towards strong reflective targets such as glass or white walls within 20 meters to prevent excessive backscatter, which may damage the APD detector.
6. Do not plug or unplug the cable while the power is on.
7. Ensure correct polarity when connecting the power source, as incorrect polarity may result in permanent damage to the equipment.



# 4 km Laser Rangefinder - 1535nm

**LSP-LRS-0410A**

## Product Description:

The LSP-LRS-0410A Laser Rangefinder Module is developed based on the 1535nm erbium doped glass laser, belongs to the class 1 eye safe laser products. This product is single pulsed range finder, ranging more than 4 km (to 2.3\*2.3m vehicle) under the visibility over 8km.

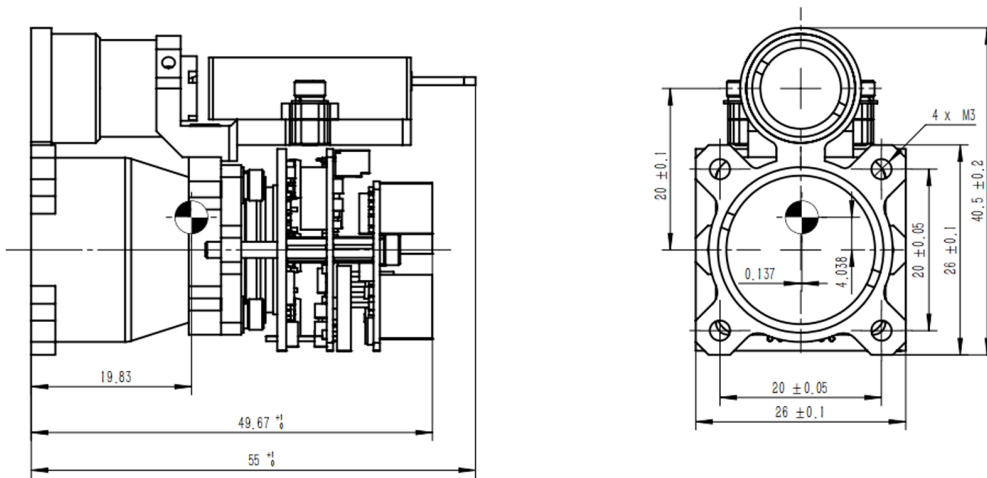


- Laser Ranging
- Targeting

## Technical Data

Parameters	Unit	LSP-LRS-0410A
Wavelength	nm	1535±5
Main function		“a. Single ranging and continuous ranging b. Range gate, forward and aft target indication c. self-checking function”
Operating range		“≥4,000m” Visibility > 8km; objective: 2.3*2.3m; (reflectivity > 30%; humidity≤80%)”
Laser divergence angle	mrad	≤ 0.5
Continuous ranging frequency	Hz	1-10 (Adjustable)
Ranging accuracy	m	≤±2(RMS)
Accurate ranging ratio	%	≥98
Minimum range	m	≤20
Range resolution	m	≤30(Multi Targets)
Voltage supply	V	DC9 ~ 16 (Custmizable)
Weight	g	≤ 55
Power consumption	W	“Average ≤1.5W(@1Hz); Peak ≤5W”
Dimension	mm	≤55*41*26
Working temperature	°C	-40 ~ +60
Storage temperature	°C	-50 ~ +70
Communication interface		RS422, 115200bps

## Product Dimension



Size in mm

## Special Note

1. The laser emitted by this ranging module is 1535nm, which is safe for human eyes. However, it is recommended to avoid direct eye contact with the laser.
2. When adjusting the parallelism of the three optical axes, be sure to cover the receiving lens. Failure to do so may result in permanent damage to the detector due to excessive backscatter.
3. This ranging module is not airtight. It is essential to ensure that the relative humidity in the operating environment is less than 80% and that environment is clean and sanitary to prevent damage to laser.
4. The measurement range of the ranging module is related to atmospheric visibility and the nature of the target. Distance measurement may be reduced in foggy, rainy, or windy conditions. Targets such as clusters of green leaves, white walls, and exposed limestone have higher reflectivity, which can increase the measurement range. Additionally, increasing the angle at which the target intercepts the laser beam will decrease the measurement range.
5. It is strictly forbidden to emit laser beams towards strong reflective targets such as glass or white walls within 20 meters to prevent excessive backscatter, which may damage the APD detector.
6. Do not plug or unplug the cable while the power is on.
7. Ensure correct polarity when connecting the power source, as incorrect polarity may result in permanent damage to the equipment.



# 5 km Laser Rangefinder - 1535nm

**LSP-LRS-0510A**

## Product Description:

The LSP-LRS-0510A Laser Rangefinder Module is developed based on the 1535nm erbium doped glass laser, belongs to the class 1 eye safe laser products. This product is single pulsed range finder, ranging more than 5 km (to 2.3\*2.3m vehicle) under the visibility over 8km.

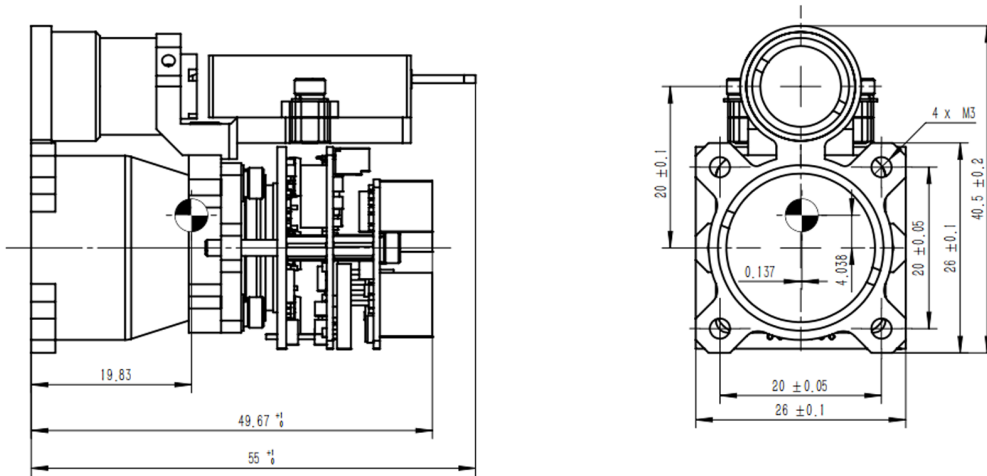


- Laser Ranging
- Targeting

## Technical Data

Parameters	Unit	LSP-LRS-0510A
Wavelength	nm	1535±5
Main function		“a. Single ranging and continuous ranging b. Range gate, forward and aft target indication c. self-checking function”
Operating range		“≥5,000m” Visibility > 8km; objective: 2.3*2.3m; (reflectivity > 30%; humidity≤80%)”
Laser divergence angle	mrad	≤ 0.5
Continuous ranging frequency	Hz	1-10 (Adjustable)
Ranging accuracy	m	≤±2(RMS)
Accurate ranging ratio	%	≥98
Minimum range	m	≤20
Range resolution	m	≤30(Multi Targets)
Voltage supply	V	DC9 ~ 16 (Custmizable)
Weight	g	≤ 55
Power consumption	W	“Average ≤1.5W(@1Hz); Peak ≤5W”
Dimension	mm	≤55*41*26
Working temperature	°C	-40 ~ +60
Storage temperature	°C	-50 ~ +70
Communication interface		RS422, 115200bps

## Product Dimension



Size in mm

## Special Note

- 1.The laser emitted by this ranging module is 1535nm, which is safe for human eyes. However, it is recommended to avoid direct eye contact with the laser.
- 2.When adjusting the parallelism of the three optical axes, be sure to cover the receiving lens. Failure to do so may result in permanent damage to the detector due to excessive backscatter.
- 3.This ranging module is not airtight. It is essential to ensure that the relative humidity in the operating environment is less than 80% and that environment is clean and sanitary to prevent damage to laser.
- 4.The measurement range of the ranging module is related to atmospheric visibility and the nature of the target. Distance measurement may be reduced in foggy, rainy, or windy conditions. Targets such as clusters of green leaves, white walls, and exposed limestone have higher reflectivity, which can increase the measurement range. Additionally, increasing the angle at which the target intercepts the laser beam will decrease the measurement range.
5. It is strictly forbidden to emit laser beams towards strong reflective targets such as glass or white walls within 20 meters to prevent excessive backscatter, which may damage the APD detector.
6. Do not plug or unplug the cable while the power is on.
7. Ensure correct polarity when connecting the power source, as incorrect polarity may result in permanent damage to the equipment.



# 6 km Laser Rangefinder - 1535nm

**LSP-LRS-0610A**

## Product Description:

The LSP-LRS-0610A Laser Rangefinder Module is developed based on the 1535nm erbium doped glass laser, belongs to the class 1 eye safe laser products. This product is single pulsed range finder, ranging more than 6 km (to 2.3\*2.3m vehicle) under the visibility over 10km.

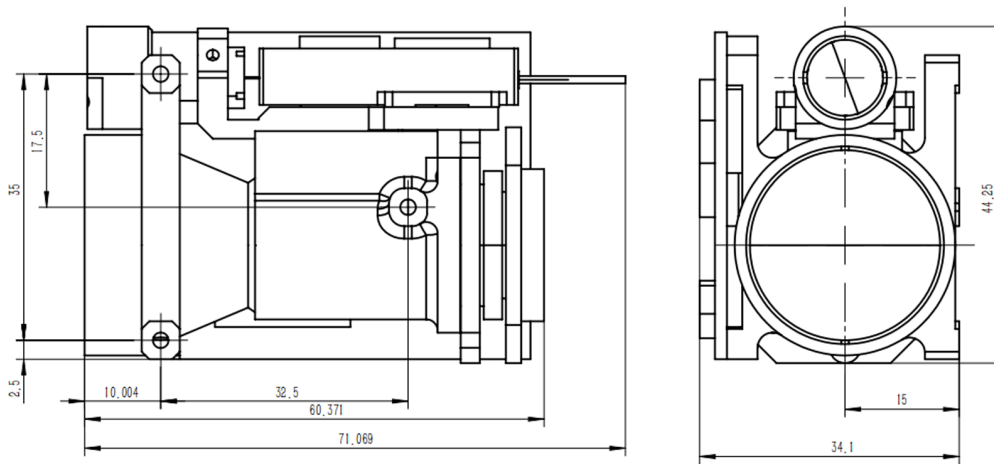


- Laser Ranging
- Targeting

## Technical Data

Parameters	Unit	LSP-LRS-0610A
Wavelength	nm	1535±5
Main function		“a. Single ranging and continuous ranging b. Range gate, forward and aft target indication c. self-checking function”
Operating range		“≥6,000m” Visibility > 10km; objective: 2.3*2.3m; (reflectivity > 30%; humidity≤80%)”
Laser divergence angle	mrad	≤ 0.5
Continuous ranging frequency	Hz	1-10 (Adjustable)
Ranging accuracy	m	±2(RMS)
Accurate ranging ratio	%	≥98
Minimum range	m	≤30
Range resolution	m	≤30(Multi Targets)
Voltage supply	V	DC9 ~ 16 (Custmizable)
Weight	g	≤ 70
Power consumption	W	“Average ≤1.5W(@1Hz); Peak ≤5W”
Dimension	mm	≤72*45*35
Working temperature	°C	-40 ~ +60
Storage temperature	°C	-50 ~ +70
Communication interface		RS422, 115200bps

## Product Dimension



Size in mm

## Special Note

- 1.The laser emitted by this ranging module is 1535nm, which is safe for human eyes. However, it is recommended to avoid direct eye contact with the laser.
- 2.When adjusting the parallelism of the three optical axes, be sure to cover the receiving lens. Failure to do so may result in permanent damage to the detector due to excessive backscatter.
- 3.This ranging module is not airtight. It is essential to ensure that the relative humidity in the operating environment is less than 80% and that environment is clean and sanitary to prevent damage to laser.
- 4.The measurement range of the ranging module is related to atmospheric visibility and the nature of the target. Distance measurement may be reduced in foggy, rainy, or windy conditions. Targets such as clusters of green leaves, white walls, and exposed limestone have higher reflectivity, which can increase the measurement range. Additionally, increasing the angle at which the target intercepts the laser beam will decrease the measurement range.
5. It is strictly forbidden to emit laser beams towards strong reflective targets such as glass or white walls within 20 meters to prevent excessive backscatter, which may damage the APD detector.
6. Do not plug or unplug the cable while the power is on.
7. Ensure correct polarity when connecting the power source, as incorrect polarity may result in permanent damage to the equipment.



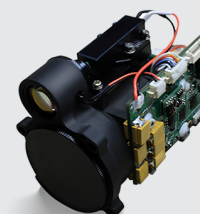


# 8 km Laser Rangefinder - 1535nm

**LSP-LRS-0810A**

## Product Description:

The LSP-LRS-0810A Laser Rangefinder Module is developed based on the 1535nm erbium doped glass laser, belongs to the class 1 eye safe laser products. This product is single pulsed range finder, ranging more than 8 km (to 2.3\*2.3m vehicle) under the visibility over 12km.

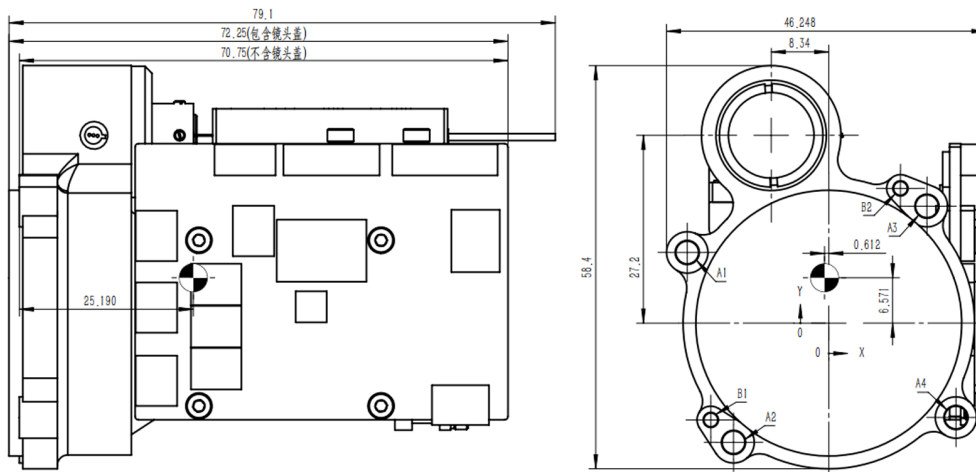


- Laser Ranging
- Targeting

## Technical Data

Parameters	Unit	LSP-LRS-0810A
Wavelength	nm	1535±5
Main function		“a. Single ranging and continuous ranging b. Range gate, forward and aft target indication c. self-checking function”
Operating range		“≥8,000m” Visibility > 12km; objective: 2.3*2.3m; (reflectivity > 30%; humidity≤80%)”
Laser divergence angle	mrad	≤ 0.3
Continuous ranging frequency	Hz	1-10 (Adjustable)
Ranging accuracy	m	≤±2(RMS)
Accurate ranging ratio	%	≥98
Minimum range	m	≤30
Range resolution	m	≤30(Multi Targets)
Voltage supply	V	DC9 ~ 16 (Custmizable)
Weight	g	≤ 120
Power consumption	W	“Average ≤1.5W(@1Hz); Peak ≤5W”
Dimension	mm	≤80*47*59
Working temperature	°C	-40 ~ +60
Storage temperature	°C	-50 ~ +70
Communication interface		RS422, 115200bps

## Product Dimension



Size in mm

## Special Note

- 1.The laser emitted by this ranging module is 1535nm, which is safe for human eyes. However, it is recommended to avoid direct eye contact with the laser.
- 2.When adjusting the parallelism of the three optical axes, be sure to cover the receiving lens. Failure to do so may result in permanent damage to the detector due to excessive backscatter.
- 3.This ranging module is not airtight. It is essential to ensure that the relative humidity in the operating environment is less than 80% and that environment is clean and sanitary to prevent damage to laser.
- 4.The measurement range of the ranging module is related to atmospheric visibility and the nature of the target. Distance measurement may be reduced in foggy, rainy, or windy conditions. Targets such as clusters of green leaves, white walls, and exposed limestone have higher reflectivity, which can increase the measurement range. Additionally, increasing the angle at which the target intercepts the laser beam will decrease the measurement range.
5. It is strictly forbidden to emit laser beams towards strong reflective targets such as glass or white walls within 20 meters to prevent excessive backscatter, which may damage the APD detector.
6. Do not plug or unplug the cable while the power is on.
7. Ensure correct polarity when connecting the power source, as incorrect polarity may result in permanent damage to the equipment.



# 10 km Laser Rangefinder - 1535nm

**LSP-LRS-1010A**

## Product Description:

The LSP-LRS-1010A Laser Rangefinder Module is developed based on the 1535nm erbium doped glass laser, belongs to the class 1 eye safe laser products. This product is single pulsed range finder, ranging more than 10 km (to 2.3\*2.3m vehicle) under the visibility over 15km.

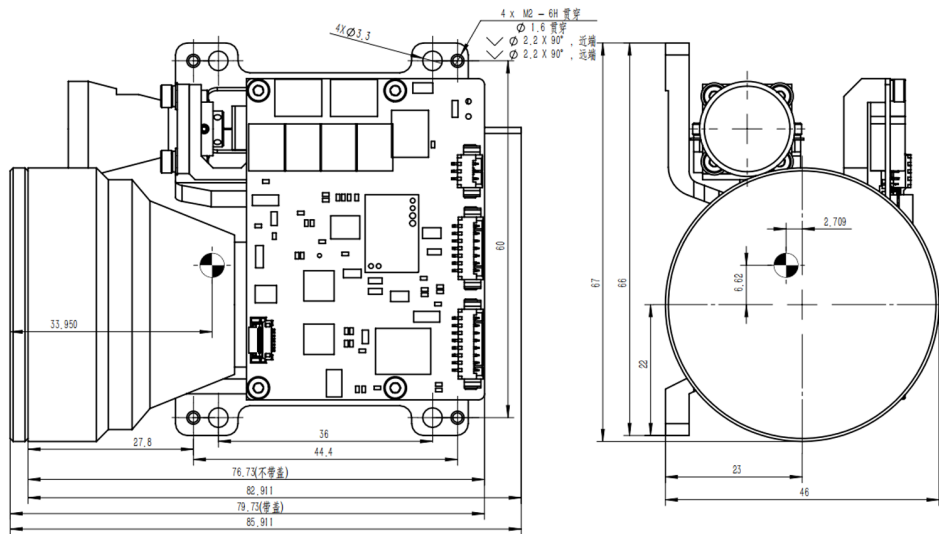


- Laser Ranging
- Targeting

## Technical Data

Parameters	Unit	LSP-LRS-1010A
Wavelength	nm	1535±5
Main function		“a. Single ranging and continuous ranging b. Range gate, forward and aft target indication c. self-checking function”
Operating range		“≥10,000m” Visibility > 15km; objective: 2.3*2.3m; (reflectivity > 30%; humidity≤80%)”
Laser divergence angle	mrad	≤ 0.3
Continuous ranging frequency	Hz	1-10 (Adjustable)
Ranging accuracy	m	≤±2(RMS)
Accurate ranging ratio	%	≥98
Minimum range	m	≤50
Range resolution	m	≤30(Multi Targets)
Voltage supply	V	DC9 ~ 16 (Custmizable)
Weight	g	≤ 140
Power consumption	W	“Average ≤1.5W(@1Hz); Peak ≤5W”
Dimension	mm	≤83*68*46
Working temperature	°C	-40 ~ +60
Storage temperature	°C	-50 ~ +70
Communication interface		RS422, 115200bps

## Product Dimension



Size in mm

## Special Note

1. The laser emitted by this ranging module is 1535nm, which is safe for human eyes. However, it is recommended to avoid direct eye contact with the laser.
2. When adjusting the parallelism of the three optical axes, be sure to cover the receiving lens. Failure to do so may result in permanent damage to the detector due to excessive backscatter.
3. This ranging module is not airtight. It is essential to ensure that the relative humidity in the operating environment is less than 80% and that environment is clean and sanitary to prevent damage to laser.
4. The measurement range of the ranging module is related to atmospheric visibility and the nature of the target. Distance measurement may be reduced in foggy, rainy, or windy conditions. Targets such as clusters of green leaves, white walls, and exposed limestone have higher reflectivity, which can increase the measurement range. Additionally, increasing the angle at which the target intercepts the laser beam will decrease the measurement range.
5. It is strictly forbidden to emit laser beams towards strong reflective targets such as glass or white walls within 20 meters to prevent excessive backscatter, which may damage the APD detector.
6. Do not plug or unplug the cable while the power is on.
7. Ensure correct polarity when connecting the power source, as incorrect polarity may result in permanent damage to the equipment.

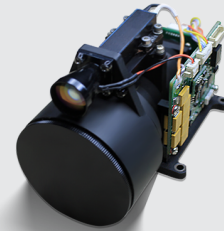


# 12 km Laser Rangefinder - 1535nm

**LSP-LRS-1210A**

## Product Description:

The LSP-LRS-1210A Laser Rangefinder Module is developed based on the 1535nm erbium doped glass laser, belongs to the class 1 eye safe laser products. This product is single pulsed range finder, ranging more than 12 km (to 2.3\*2.3m vehicle) under the visibility over 20km.

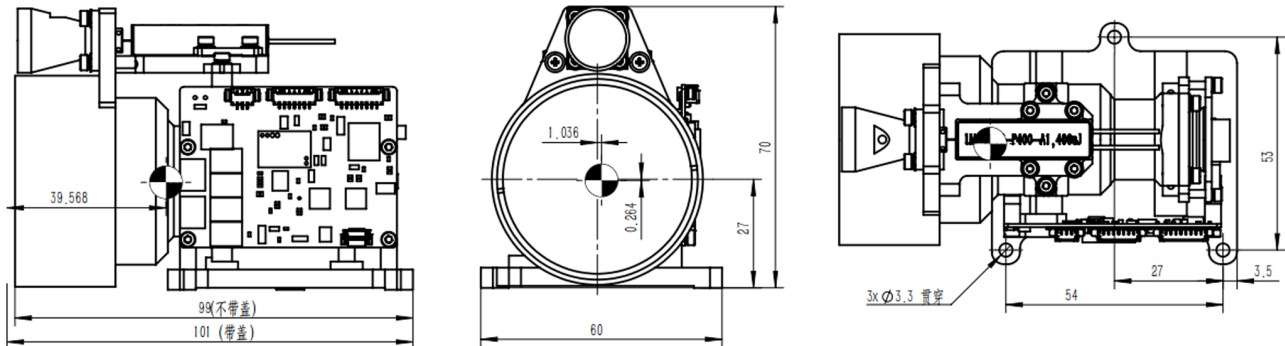


- Laser Ranging
- Targeting

## Technical Data

Parameters	Unit	LSP-LRS-1210A
Wavelength	nm	1535±5
Main function		“a. Single ranging and continuous ranging b. Range gate, forward and aft target indication c. self-checking function”
Operating range		“≥12,000m” Visibility > 20km; objective: 2.3*2.3m; (reflectivity > 30%; humidity≤80%)”
Laser divergence angle	mrad	≤ 0.3
Continuous ranging frequency	Hz	1-10 (Adjustable)
Ranging accuracy	m	≤±3(RMS)
Accurate ranging ratio	%	≥98
Minimum range	m	≤50
Range resolution	m	≤30(Multi Targets)
Voltage supply	V	DC9 ~ 18 (Custmizable)
Weight	g	≤ 240
Power consumption	W	“Average ≤1.5W(@1Hz); Peak ≤5W”
Dimension	mm	≤100*60*70
Working temperature	°C	-40 ~ +60
Storage temperature	°C	-50 ~ +70
Communication interface		RS422, 115200bps

## Product Dimension



Size in mm

## Special Note

- 1.The laser emitted by this ranging module is 1535nm, which is safe for human eyes. However, it is recommended to avoid direct eye contact with the laser.
- 2.When adjusting the parallelism of the three optical axes, be sure to cover the receiving lens. Failure to do so may result in permanent damage to the detector due to excessive backscatter.
- 3.This ranging module is not airtight. It is essential to ensure that the relative humidity in the operating environment is less than 80% and that environment is clean and sanitary to prevent damage to laser.
- 4.The measurement range of the ranging module is related to atmospheric visibility and the nature of the target. Distance measurement may be reduced in foggy, rainy, or windy conditions. Targets such as clusters of green leaves, white walls, and exposed limestone have higher reflectivity, which can increase the measurement range. Additionally, increasing the angle at which the target intercepts the laser beam will decrease the measurement range.
5. It is strictly forbidden to emit laser beams towards strong reflective targets such as glass or white walls within 20 meters to prevent excessive backscatter, which may damage the APD detector.
6. Do not plug or unplug the cable while the power is on.
7. Ensure correct polarity when connecting the power source, as incorrect polarity may result in permanent damage to the equipment.

