



Product Brochure

- 1.5 μ m Fiber Laser -

01 Lidar Fiber Laser



02 DTS Fiber Laser



03 Remote Sensing Mapping Laser



LIDAR FIBER LASER

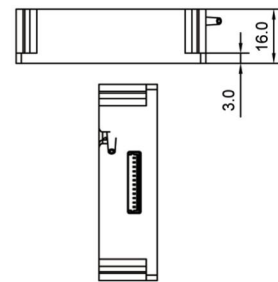
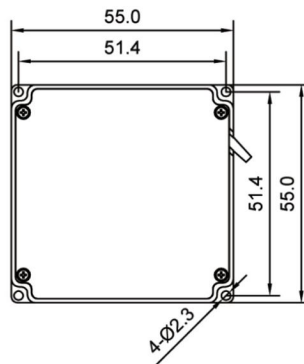
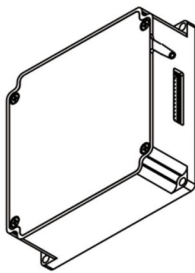
Features :

- Laser integration technology
- Narrow pulse drive and shaping technology
- ASE noise suppression technology
- Narrow pulse amplification technique with low power
- Compact space disk fiber process technology

Applications :

- Automatic driving
- Laser ranging
- Remote sensing survey
- Security monitoring

LSP - FLMP - 1535 - 04 - mini



NOTE

1. Laser safety: The output of this product is the laser radiation visible to the non-human eye, you should wear goggles before use, please avoid exposing your eyes or skin directly to the laser when the laser is working.
2. Power use: ensure to use under the rated voltage and rated power.
3. Static electricity protection: light source in transport, storage, use must take appropriate anti-static measures.
4. When in use, the surface of the equipment should be properly cleaned, otherwise it will easily cause endface burns.
5. It is recommended that the thermal conductivity of the surface using high thermal conductivity of the silicone grease or thermal pad for timely heat dissipation or the laser internal temperature rise, will trigger the over-temperature protection function, shut down the laser output.
6. Follow the LumiSpot operating instruction manual.
7. Any other questions, please contact us.
8. Storage and operation in a non-condensing environment is required at temperatures below ambient.



Technical Data

PARAMETERS	Mini.	Typical	Max	Description.
Working mode		Pulsed		
Central wavelength	1533nm	1535nm	1537nm	CWL 1550±3nm can be specific ordered
FWHM	3ns	4ns	5ns	Adjustable
Re-frequency	0.1MHZ	0.5MHZ	2MHZ	Adjustable
Ave. Power	0.7W	1W	1.05W	@3ns, 500KHZ, 25°C, 100% DAC Setting
Peak power	0.6KW	0.7KW	0.75KW	Vary depends on repetition frequency
Spectral distribution	90%			Under CWL ±1nm, Spectral proportion @4ns, 500KHZ
Polarization state		Random		
Burst mode		External triggering		
Pulse trigger signal&light delay time	20ns		40ns	
Pulse-out delay jitter	80ps	120ps	150ps	Refer to the reference light
Electrical power consumption			13W	@Type output 1W
Working voltage	9V	12V	13V	
Working temperature (@ shell)	-40°C		85°C	Laser shut down @95°C
Storage temperature	-40°C		105°C	
Packing size		50mm*55mm*16mm		
Weight		60g	70g	
Light output mode		FC/APC, Or Optical fiber collimation output		
Output fiber cable length		0.5m		900T drivepipe
Interface		CJT A1251WRA-S-12P		

Additional Information

The product has strong environmental adaptability, the type has passed environmental adaptability tests such as high and low temperature, shock, vibration, etc. The product can be used in complex and harsh environments, while aiming at vehicle specification level standard verification, suitable for automatic driving vehicle LIDAR.

REMOTE SENSING MAPPING LASER

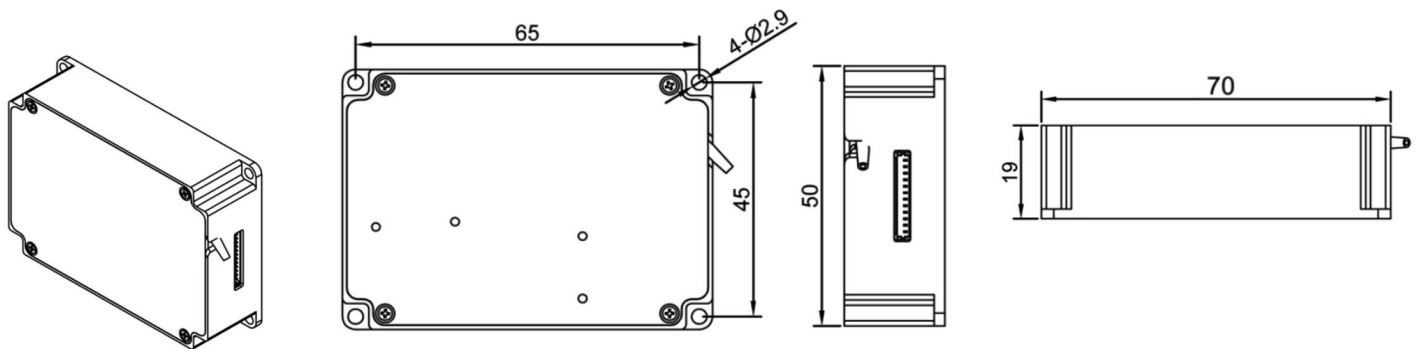
Features :

- Laser integration technology
- Narrow pulse drive and shaping technology
- ASE noise suppression technology
- Narrow pulse amplification technique with low power
- Compact space disk fiber process technology

Applications :

- Automatic driving
- Laser ranging
- Remote sensing survey
- Security monitoring

LSP - FLMP - 1550 - 03 - 70*70*25



NOTE

1. Laser safety: The output of this product is the laser radiation visible to the non-human eye, you should wear goggles before use, please avoid exposing your eyes or skin directly to the laser when the laser is working.
2. Power use: ensure to use under the rated voltage and rated power.
3. Static electricity protection: light source in transport, storage, use must take appropriate anti-static measures.
4. When in use, the surface of the equipment should be properly cleaned, otherwise it will easily cause endface burns.
5. It is recommended that the thermal conductivity of the surface using high thermal conductivity of the silicone grease or thermal pad for timely heat dissipation or the laser internal temperature rise, will trigger the over-temperature protection function, shut down the laser output.
6. Follow the LumiSpot operating instruction manual.
7. Any other questions, please contact us.
8. Storage and operation in a non-condensing environment is required at temperatures below ambient.



Technical Data

PARAMETERS	Mini.	Typical	Max.	Description
Working mode		Pulsed		
Central wavelength	1547nm	1550nm	1553nm	CWL 1535±3nm can be specific ordered
FWHM	1ns		10ns	Adjustable
Re-frequency	0.1MHZ	0.5MHZ	2MHZ	Adjustable
Ave. Power	0.95W	1W	2W	@2ns, 500KHZ, 25°C
Peak power		1.5KW	2KW	Vary depends on repetition frequency
Spectral distribution	90%			Under CWL ±1nm, Spectral proportion @2ns, 500KHZ
Polarization state		Random		
Burst mode		External triggering		
Pulse trigger signal and light delay time	70ns		90ns	
Pulse-out delay jitter	20ps		120ps	Adjustable
Electrical power consumption			12W	@Type output 1W
Working voltage	9V	12V	13V	
Working temperature (@ shell)	-40°C		85°C	Laser shut down @95°C
Storage temperature	-40°C		105°C	
Packing size		50mm*70mm*19mm		
Weight			100g	
Light output mode	FC/APC, Or Optical fiber collimation output			
Output fiber cable length		0.5m		900T drivepipe
Interface		CJT A1251WRA-S-12P		

Additional Information

The product has strong environmental adaptability, the type has passed environmental adaptability tests such as high and low temperature, shock, vibration, etc. The product can be used in complex and harsh environments, while aiming at vehicle specification level standard verification, suitable for automatic driving vehicle LIDAR.

Notification:

- ① Type value: @3ns, 500KHZ, 1W, 25°C
- ② Peak power $P_p \geq 2.5KW$ @CWL 1535nm, 50KHZ

DTS FIBER LASER

Features :

- Modular package, compact structure, small size
- Wide operating temperature range
- Super low power consumption
- External TTL trigger signal to achieve pulse output

Applications :

- Lidar
- Distance measurement
- Distributed Temperature Measurement



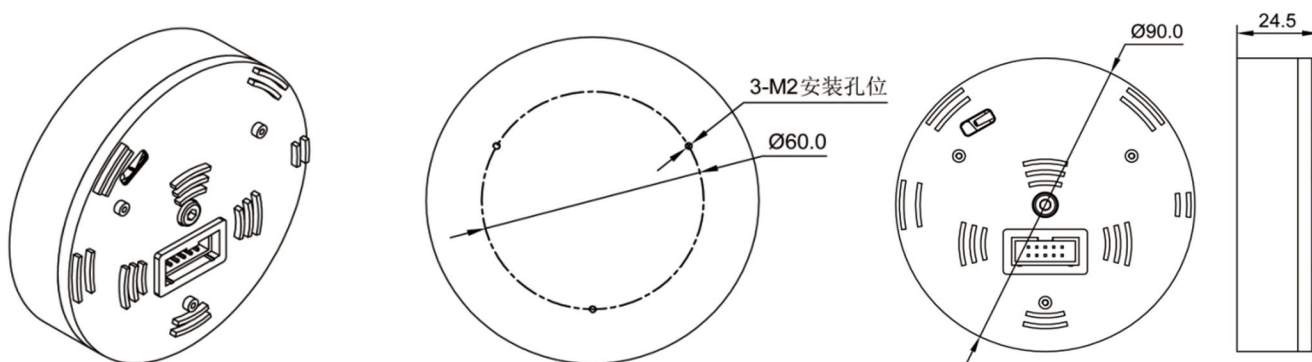
NOTE

1. Laser safety: The output of this product is laser radiation visible to the non-human eye, you should bring good goggles before use, when the laser is working, please avoid exposing your eyes or skin directly to the laser.
2. Power use: Ensure that the rated voltage, rated power to use.
3. Electrostatic protection: The light source must take appropriate anti-static measures when transporting, storing and using.
4. Fiber endface: Properly clean the output endface when in use to ensure that it is clean and free of dirt, otherwise it is easy to cause endface burn.
5. Heat dissipation requirements: laser work to ensure good heat dissipation, it is recommended that the thermal conductivity of the surface using high thermal conductivity of the silicone grease or thermal pad for timely heat dissipation, otherwise the laser internal temperature rises, will trigger the over-temperature protection function, shut down the laser output.



Technical Data

PARAMETERS	Min.	Typical	Max.
Working wavelength	1548nm	1550nm	1552nm
Working mode	Internal/external trigger		
Output peak optical power			3 kW
Pulse width	1 ns	3 ns	10 ns
Repetition frequency	50 kHz	100 kHz	2000 kHz
-3dB spectral width			1nm
Output stability @ 12 h(room temp.)			5%
High temp. power attenuation@60C			10%
Low temp. power attenuation @ -40C			10%
Operating Temperature	-40℃		60%
Storage Temperature	-40℃		70%
Operating Humidity Range	5		90%
Laser Size (without output)		φ90mm *24.5mm	
Pigtail length		300 mm	
Laser light delay jitter		≤ 0.1ns	
Weight		< 200g	
Average power		< 16 w	
Operating voltage		DC 9V ~ 13V	



江苏亮点光点集团

***LumiSpot* Tech**

Illuminate Life From Laser



www.Lumispot-tech.com

sales@lumispot.cn

+86-510-83781808