

# 1535nm Mini Pulsed Fiber Laser

LSP-FLMP-1535-04-mini

## Product Description:

This product belongs to the human eye-safe 1.5μm micro pulsed fiber laser light source from LumiSpot Technology Co., Ltd. This product has the characteristics of high electricity-light conversion efficiency, low ASE noise, low power consumption, wide range of working temperature and non-linear noise, which is suitable for using as the laser light source of remote sensing mapping & ranging.



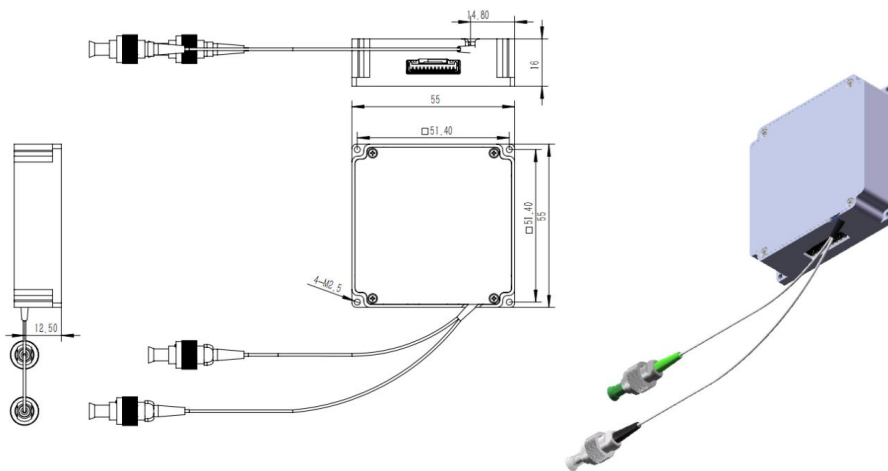
## Application:

Automotive driving  
Laser ranging  
Remote sensing mapping  
Security monitoring

## Main Features

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

## Dimension:



## 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	Unit	Min.	Typical	Max	Remarks
Working Mode		Pulsed			
Central Wavelength	nm	1532	1535	1537	
Pulsed Width(FWHM)	ns	-	3	-	
Repetition Frequency	kHz	100	500	2000	Adjustable
Average Power	W	0.7	1	1.1	
Peak Power	W		1160 <sup>®</sup>		The repetition frequency varies from one to another
Peak Power of the reference light	mW	0.4	0.5	0.6	
spectral distribution	%	90			Power share in bandwidth @3ns, 500kHz
polarization state	NA	Randomn			
Trigger Mode	NA	External trigger			
Reference light pulse and main output pulse delay (optical-optical delay)	ns			70	Less than 20 ps at different temperatures for the same laser
Pulse out delay jitter	ps			80	Measurement method: Take the reference light as a reference, measure the main output jitter of the pulse from the oscilloscope The falling edge of the pulse observed by the oscillator Jitter of the falling edge of the pulse observed from the oscilloscope (automatic afterglow)
electric power consumption	W			13	@Average Power 1W
operating voltage	V	9	12	13	
Operating Temperature(@Shell)	°C	-40		85	The laser will turn off at 95°C
Storage temperature	°C	-40		105	
Package Size	mm	55x55x16			
Weight	g			100	
Optical output method		FC/APC+ FC/UPC Head			
Main Output Length	m		0.27		900Tcasing
The length of the reference light	m		0.24		900Tcasing
Electrical Interface Model		MOLEX 505567-1281			