# 1.5μm Pulsed Fiber Laser

Lumispot Tech OEM Laser LIDAR Solution


## Forcus On LIDAR Laser Source

Our Major Technology

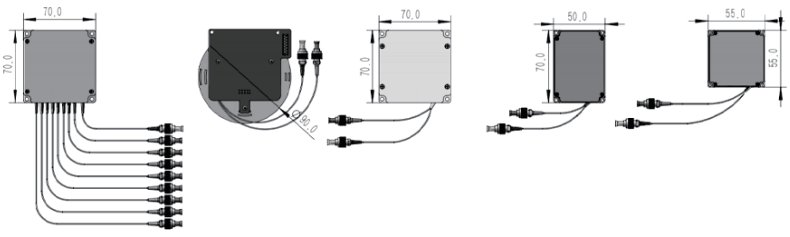
Nanosecond-Level Narrow Pulse Drive Tech
Optical Nonlinear Effect Suppression Tech
Unique Power Consumption Optimization Tech
Near-Diffraction-Limit Beam Quality Control Tech

Remote Sensing Mapping

Automotive LIDAR

Obstacle Avoidance

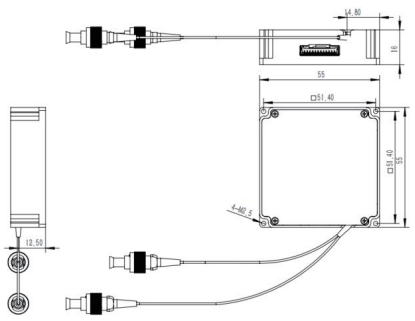
This product Series is 1.5μm pulsed fiber laser light source from LumiSpot Technology Co., Ltd. This product has the characteristics of high electricity-light conversion efficiency, low ASE noise, low power consumption ,wide range of working temperature and non-linear noise, which is suitable for using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

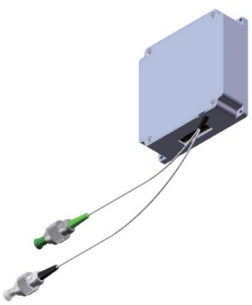


# 1.5μm/1kW Mini Pulsed Fiber Laser

Lumispot Tech OEM Laser LIDAR Solution


| LSP-FLMP-1535-04-mini | Unit | Min. | Typical | Max. | Remarks |
|---|---|---|---|---|---|
| Central Wavelength | nm | 1532 | 1535 | 1537 | Customization 1550 |
| Pulsed Width(FWHM) | ns | - | 3 | - | Adjustable |
| Repetition Frequency | MHz | 0.1 | 0.5 | 2 | Adjustable |
| Average Power | W | 0.7 | 1 | 1.1 | @3ns,500kHz,25°C,100%DAC Setting |
| Peak Power | W | - | 1000 | - | |
| spectral distribution | % | 90 | | | Fractional Bandwidth@3ns,500kHz |
| Jitter | | | 80 | | taking reference light as a benchmark |
| Trigger Mode | NA | | External Trigger | | |
| electric power consumption | W | | | 13 | @Typical Output 1W |
| operating voltage | V | 9 | 12 | 13 | |
| Electrical Interface Model | | | MOLEX 505567-1281 | | |
| Operating Temperature(@Shell) | °C | -40 | | 85 | |
| Storage temperature | °C | -40 | | 95 | |
| Package Size | mm | | 55*55*19 | | Customization 55*55*16mm |
| Weight | g | | | 70 | |
| Optical output method | | | FC/APC (Main output) FC/UPC (Reference Light) | | 900um Sleeve |
| The length of the reference light | m | | 0.3 | | |





# 1.5μm/3kW Pulsed Fiber Laser

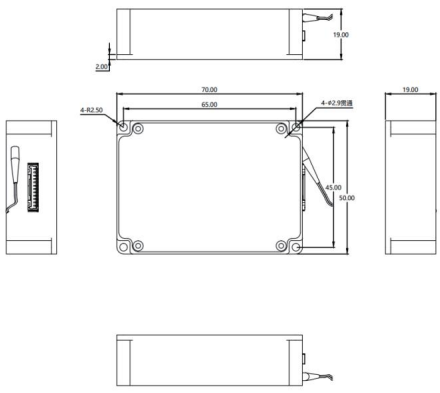
Lumispot Tech OEM Laser LIDAR Solution

| LSP-FLMP-1535-02 | Unit | Min. | Typical | Max. | Remarks |
|---|---|---|---|---|---|
| Central Wavelength | nm | 1547 | 1550 | 1553 | Customization 1535 |
| Pulsed Width(FWHM) | ns | - | 3 | - | Adjustable |
| Repetition Frequency | MHz | 0.1 | 0.5 | 2 | Adjustable |
| Average Power | W | 0.95 | 1 | 2 | @3ns,500kHz,25°C |
| Peak Power | kW | - | 1.4① | 1.6 | 3.3kW Peak Power Customizable② |
| spectral distribution | % | 90 | | | Fractional Bandwidth@3ns,500kHz |
| Jitter | | | 80 | | taking reference light as a benchmark |
| Trigger Mode | NA | | External Trigger | | |
| electric power consumption | W | | 13 | 15 | @Typical Output 1W |
| operating voltage | V | 9 | 12 | 13 | |
| Electrical Interface Model | | | MOLEX 505567-1281 | | |
| Operating Temperature(@Shell) | °C | -40 | | 85 | |
| Storage temperature | °C | -40 | | 105 | |
| Package Size | mm | | 50*70*19 | | Customization 55*55*16mm |
| Weight | g | | | 100 | |
| Optical output method | | | FC/APC (Main output) FC/UPC (Reference Light) | | 900um Sleeve |
| The length of the reference light | m | | 0.18 | | |

Note:

① Typical Value @3ns, 500kHz, 2W, 25°C

② E.g. Pp ≥3.3kW @CWL1535nm, 50kHz.



# DTS Pulsed Fiber Laser

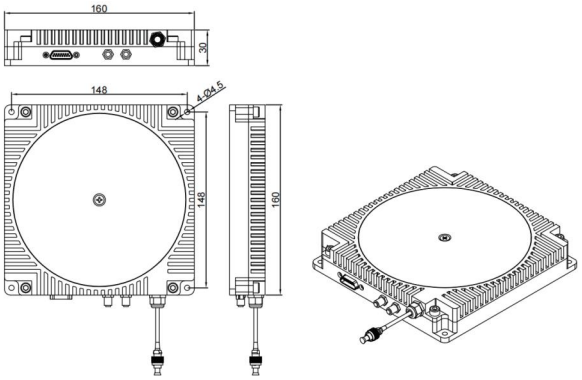
Lumispot Tech OEM Laser LIDAR Solution


| LSP-DTS-MOPA-1550-02 | Unit | Min. | Typical | Max. | Remarks |
|---|---|---|---|---|---|
| Working Mode | - | | Pulsed | | |
| Polarization State | - | | Random | | |
| Central Wavelength | nm | 1547 | 1550 | 1553 | |
| Pulsed Width(FWHM) | ns | 1 | 3 | 20 | Adjustable |
| Repetition Frequency | kHz | 5 | 10 | 200 | Adjustable |
| Spectrum Width | nm | - | 0.5 | - | 3dB |
| Average Power | mW | - | 2 | 3 | |
| Power Rate Stability | % | - | 5 | 15 | Whole Temp. |
| Peak Power | W | 0 | - | 50 | |
| Jitter | ns | - | - | 0.3 | |
| Beam Quality | - | - | - | 1.1 | Multi Mode |
| Operating Temperature | °C | -20 | | 60 | |
| Storage temperature | °C | -40 | | 85 | |
| Trigger Mode | - | | Internal/External Trigger | | |
| Operating Voltage | V | - | 12 | - | |
| Power Consumption | W | - | - | 3 | |
| Electrical Interface Model | - | | DB9 | | Public Header |
| Package Size | mm | | 150*120*21 | | |
| Weight | g | - | - | 500 | |
| Optical output method | - | | Jump Wire (FC/APC) | | Capable of Integrating Raman WDM |
| The length of the Fiber | mm | 0.9 | 1 | 1.1 | Customization |

# 1.5μm/15kW High Peak Power Pulsed Fiber Laser

Lumispot Tech OEM Laser LIDAR Solution

| LSP-FLMP-1550-15k-04-S5-01-T | Unit | Min. | Typical | Max. | Remarks |
|---|---|---|---|---|---|
| Polarization State | | | Random | | |
| Central Wavelength | nm | 1547 | 1550 | 1553 | 1064nm Customizable |
| Pulsed Width(FWHM) | ns | | 3 | 5 | Fixed Pulsed Width |
| Repetition Frequency | KHz | 30 | 50 | 100 | Customizable |
| Average Power | W | | 3 | 4 | |
| Peak Power | kW | | 12 | 15 | |
| Jitter | ns | | | 3 | |
| Trigger Mode | | | Internal/External Trigger | | |
| Operating Voltage | V | | 28 | | |
| Power Consumption | W | | | 100 | |
| Electrical Interface Model | | | J29A-15ZKW | | |
| Operating Temperature | °C | -40 | | 60 | |
| Storage temperature | °C | -40 | | 95 | |
| Package Size | mm | | 160*160*30 | | |
| Weight | g | | | 2000 | |
| Optical output method | | | Jump Wire | | Tailored Collimator |
| The length of the Fiber | mm | | 300 | | 3mm Sleeve |



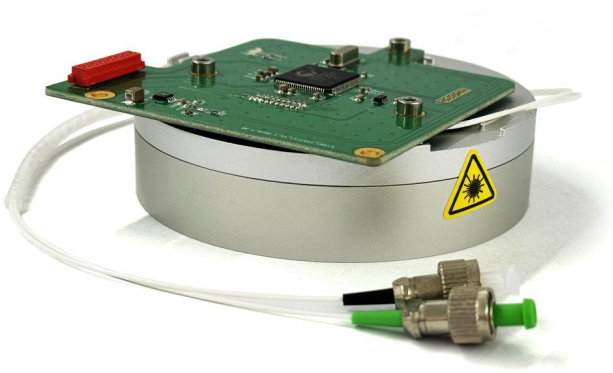
# 8-in-1 1.5μm TOF LiDAR Source

Lumispot Tech OEM Laser LIDAR Solution


| | Unit | Min. | Typical | Max. | Remarks |
|---|---|---|---|---|---|
| Working Mode | -- | | Pulsed | | |
| Polarization State | -- | | Random | | |
| Working Wavelength | nm | 1547 | 1550 | 1553 | |
| Pulse Width | ns | | 3 | | |
| Spectral Width | nm | | 0.5 | | 3dB |
| Beam Quality | -- | | | 1.3 | $M^2$ (Beam Quality Factor) |
| Output Mode | -- | | Bare Fiber Output | | 1x8 Output |
| Output Beam Mode Field Diameter | um | | 9.1 | | @1550nm |
| Output Fiber NA (Numerical Aperture) | -- | | 0.14 | | |
| Average Power | W | | 1 | 3.2 | Total Output Power of the Whole System |
| Reference Peak Power | mw | 0.5 | | 1 | |
| Main Peak Power | kW | | | 1.5 | |
| Repetition Rate | kHz | 50 | 460 | 2000 | |
| Power Stability | % | | | 5 | RMS@25℃, 8 Hours |
| Trigger Type | -- | | External Trigger | | |
| Trigger Mode | -- | | TTL | | |
| Operating Voltage | V | 9 | 12 | 13 | |
| Power Consumption | W | | | 30 | |
| Electro-Optic Delay | ns | 20 | | 60 | |
| Opto-Optic Delay | ns | 20 | | 100 | |
| Pulse Jitter | ps | | 100 | | |
| Interface Model | -- | | Molex 505567-1281 | | |
| Mechanical Dimensions | mm | | 70*70*33 | | |
| Weight | g | | | 300 | |
| Output Fiber Length | mm | 10 | | 500 | Customizable |
| Operating Temperature | ℃ | -40 | | 85 | |
| Storage Temperature | ℃ | -40 | | 95 | |
| Cooling Method | -- | | Contact Conduction Cooling | | Maximum Heating Power 28W |

# Disk Type Pulsed Erbium Fiber Laser

Lumispot Tech OEM Laser LIDAR Solution



| | Unit | Min. | Typical | Max. | Remarks |
|---|---|---|---|---|---|
| Operating Mode | | | Pulsed | | |
| Central Wavelength | nm | 1548 | 1550 | 1558 | |
| Pulse Width (FWHM) | ns | 1 | 3 | 10 | Adjustable |
| Repetition Rate | kHz | 50 | 500 | 2000 | Adjustable |
| Average Power | mW | | 750 | | |
| Peak Power | kW | | | 3 | |
| Spectral Distribution | % | | 95 | | Spectral Proportion within CWL±1nm @ 3ns, 500kHz |
| Polarization State | NA | | Randomn | | |
| Trigger Mode | NA | | External Trigger | | |
| Electro-Optical Delay (from electrical trigger to light emission) | ns | 90 | | 100 | |
| Opto-Optical Delay (from monitoring light to main light) | ns | 50 | | 70 | |
| Electrical Power Consumption | W | | | 24 | Full Temperature Range |
| Operating Voltage | V | 9 | 12 | 13 | |
| Operating Temperature | ℃ | -40 | | 65 | Laser Shuts Down at 95℃ |
| Storage Temperature | ℃ | -40 | | 85 | |
| Dimensions | mm | | Φ90*24.5 | | |
| Weight | g | | | 100 | |
| Light Output Mode | | | FC/APC, FC/UPC | | Customizable Fiber Collimated Output |
| Output Fiber Length | mm | | 340 | | Excluding Fiber Connectors |
| Electrical Interface Model | | | TE 1-215079-4 | 5 | Operates for 8 Hours at Room Temperature |
| Output Power Stability RMS | % | | | | |

# Company Profile

About Lumispot Tech


**¥78**million
Register Capital

**6**+
Ph.D

**80**%
Proportion of Talent

**150**+
Patents

Founded in 2010, Lumispot Technology Group, with its headquarters in Wuxi, boasts a registered capital of CNY 78.55 million. Our expansive facility covers an area of approximately 25,000 square meters and is powered by a dedicated team of over 500 employees. Over the past 14+ years, Lumispot has emerged as a frontrunner in the specialized field of laser information technology, underpinned by a robust technical foundation.

We specialize in the research and development of laser technology, providing a diverse portfolio of products. This range encompasses laser diodes, erbium lasers, fiber lasers, and solid-state lasers, as well as comprehensive systems including laser rangefinder modules, LiDAR lasers, structured lasers, illumination systems, Fiber Optic Gyro (FOG) components, and dazzlers. Our products find extensive applications across various sectors such as defense and security, LiDAR systems, remote sensing, inertial navigation, and technical research.

## Contact

Email : sales@lumispot.cn
Website: www.lumispot-tech.com

LSP 亮点光电

**Illuminate Future From Laser**

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

CE FDA