

## CW-PM fiber laser with Single pass frequency convertor

Compact CW Laser

1064 nm

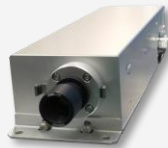
532 nm

355 nm

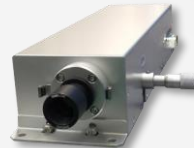
1064 · 532 · 355 nm



FL-CW-FM : 1064 nm



FL-CW-SHG : 532 nm



FL-CW-THG : 355 nm



FL-CW-3band :  
1064 · 532 · 355 nm

### Product Overview

Frequency conversion laser based on single pass configuration from CW fiber laser. Since there are no cavities at frequency conversion stage, it is rather stable even under the fluctuated environment. Residual fundamental light is also dumped outside the convertor, there are no heating materials at laser head.

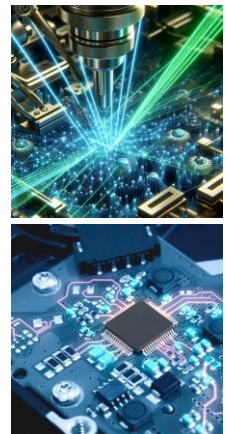
By another approach, It is also available dual/triple wavelength out from one laser unit.

### Features

- **Compact head**  
Fundamental light is delivered by PM fiber, laser head is relatively compact.
- **No heat sink**  
Residual fundamental light is coupled into MMF and dumped at outside the convertor head, there are no heat source at the convertor and easy to integrate it into the system without cooling.
- **High reliability**  
Maintenance free by OXIDE's spectacular quality crystals and the high stability fiber lasers. Optimization of nonlinear device and optical design realize compact reliable solution.
- **Customized wavelength is available**  
By adjusting the FBG in fiber laser and NLO device gratings at convertor, it is available to choose arbitrary wavelength within fundamental light of 1050 to 1090 nm range.

### Applications

- **Optical tweezers**
- **Particle imprecation**
- **Bio analysis**
- **Semiconductor inspection**
- **Optical component inspection**
- **Photoluminescence pump source**



# OXIDE

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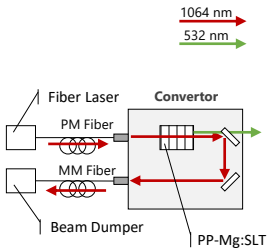
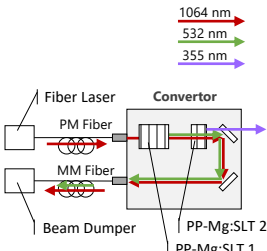
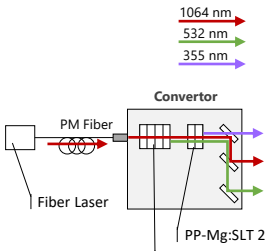


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**Oxide Yamanashi**

## Frequency convertor's Specifications

Model	FL-CW-SHG	FL-CW-THG	FL-CW-3band
Wavelength	532 nm	355 nm	355 · 532 · 1064 nm
Output Power	3 W	30 mW	30 · 400 · 3000 mW
Output Type	Free space		
Extinction Ratio	> 100:1	> 100:1	> 100:1
Beam Quality	TEM00, $M^2 < 1.2$	TEM00, $M^2 < 1.2$	TEM00, $M^2 < 1.3$
Polarization	Linear	Linear	Linear
Dimensions (Convertor)	200 x 63 x 44 mm	200 x 63 x 44 mm	160 x 100 x 45 mm
Schematics			
Features, Options, etc.	<ul style="list-style-type: none"> <li>Customized wavelength (520 to 545 nm)</li> </ul>	<ul style="list-style-type: none"> <li>Customized wavelength (351 nm)</li> <li>Customized beam diameter</li> </ul>	<ul style="list-style-type: none"> <li>Simultaneous output of 3 wavelengths</li> <li>Collinear output available</li> </ul>

## FBG type CW-PM fiber laser Licensed from FITEL

### Features

- Simple configuration
- Cost effective
- PM 980 delivery (TEM00)
- Relatively narrow linewidth
- Good combination with the frequency conversion device
- Arbitrary wavelength available between 1050-1090 nm (optional)

### Applications

- Light source for Frequency conversion
- Solder welding
- Inspection (optical tweezer)
- Spectroscopic analysis

### Specifications

Model	FL-CW-FM
Wavelength	1064 nm
Output Power	5 – 20 W
Linewidth	< 0.15 nm
Extinction Ratio	100:1
Beam Quality	TEM00, $M^2 < 1.2$
Polarization	Linear
Power Supply *	$\leq 12V, \leq 10A$
Cooling	Air
Dimensions	200 x 118 x 29 mm

\*Power supply is required to prepare separately.

We offer more options of CW lasers of various wavelengths to meet your needs. Please feel free to contact us.

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