

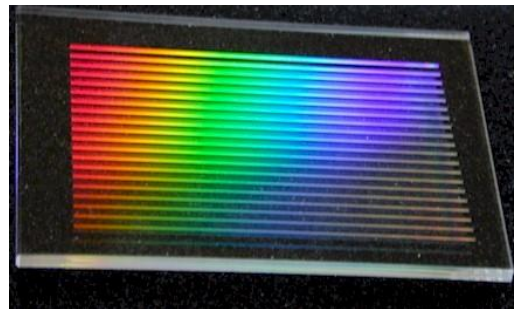
[OEPMP-100]

## Phase Mask for Fiber Bragg Grating Fabrication



**OEPMP-100S**

Phase masks with single period,  
different lengths



**OEPMP-100M**

Phase mask array with multiple periods,  
one substrate

### Features:

- Period accuracy of 0.1 pm
- Zero order < 5%
- Length of up to 170 mm
- Period down to 100 nm
- Uniform, chirped, phase shifted, superstructure
- Linear chirp, nonlinear chirp (dispersions  $\theta_2$ ,  $\theta_3$ ,  $\theta_4$ , and  $\theta_5$ , according to customer design)
- Optimized for 193 nm, 244 nm, 248 nm, 266 nm, 365 nm, 530 nm, 800 nm, 910 nm, 1030 nm, etc. illumination
- Affordable prices

### Description:

We produce phase masks, with model number **OEPMP-100**, of up to 150 mm in length for Fiber Bragg Grating (FBG) fabrication.

Our phase mask products include uniform, chirped, phase shift, long phase mask and sample phase masks for DWDM filter, fiber sensor, dispersion compensation, gain flattening, laser diode stabilizer, waveguide and other applications.

Our product line covers a wide range from 300 nm to 5000 nm in grating period. Our unique fabrication technique guarantees an ultra-high precision period, a very low zero order and a very high uniformity comparable with holographic phase mask.

### Types of Phase masks available:

Phase mask type	Description
<b>Multi Phase Mask Array in one substrate</b>	For DWDM-FBG, FBG Array fabrication
<b>Multi Phase Shift Phase Mask</b>	For up to 300 Phase Shifts in a Single-Phase Mask
<b>Multi Position Phase Mask</b>	For Sensor, Waveguide and Multi Wavelength FBG fabrication
<b>Chirped Phase Mask</b>	For Linear Chirp, Nonlinear Chirp, Arbitrary Chirp FBG fabrication
<b>Nonlinear Chirp Phase Mask</b>	For dispersions $\beta_2$ , $\beta_3$ , $\beta_4$ , and $\beta_5$ , according to customer design
<b>Long Phase Mask</b>	For FBG lengths up to 170 mm, for all available types
<b>Different Illumination Wavelength</b>	For illuminations at 248 nm, 193 nm, 530 nm, 800 nm, 910 nm, 1030 nm, etc.
<b>High Quality Phase Masks</b>	Our quality is comparable with holographic phase masks, but for a lesser cost

### New types of Phase masks:

Phase mask type	Description
<b>Multi Phase Mask Arrays</b>	Phase mask for fabrication of DWDM-FBGs with 4 channels, 8 channels, or 16 channels, without need to change the phase mask. They feature 2, 4, 8, 16 phase masks with different periods in one substrate. The mask makes the setup of fiber grating fabrication very simple. Without changing the phase mask, 4 to 16 channels of fiber grating filters can be fabricated in one setup. This approach can save both time and money when writing large amounts of FBGs. It is particularly useful when writing several FBGs of different wavelengths in a single fiber.
<b>Multi Phase Shift Phase Mask</b>	Phase mask with up to 200 phase shifts. It gives fiber optics engineers great freedom of phase mask design. The multi-phase shift mask can be incorporated with chirped phase mask and uniform phase mask or even a combination of both.
<b>Multi Position Phase Masks</b>	Phase mask arrays in horizontal orientation, vertical orientation, or both. For example, if each of FBG of an array should be positioned with high precision along a fiber, the use of this mask can eliminate the alignment problem between each phase mask and the fiber and can provide you with the best solution. In another application, if a multi-wavelength fiber laser is to be made, this mask can facilitate significantly the fiber laser fabrication process.
<b>Linear and Nonlinear Chirp Phase Masks</b>	Phase mask with linear chirp, nonlinear chirp, customer specified high-order nonlinear chirp, dispersions $\beta_2$ , $\beta_3$ , $\beta_4$ , and $\beta_5$ . Provides high precision of dispersion amount control and fabrication.
<b>High Density Chirp Phase Masks</b>	Phase mask with high chirp rate, hard made conventional phase mask fabrication method.

### Ordering information:

We maintain Phase Mask stock inventory, which is constantly increasing and updating. To check our current availability, please go to [Phase mask inventory](#) on our website.

Price discount is available for the Phase masks in stock. Certain conditions apply.