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## GIGANEX Series

**GIGANEX™**



\* This is a product concept image and is subject to change without notice.

GIGAPHOTON



## A cutting edge excimer laser combining the Gigaphoton GT Series and new technology

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We are convinced that GIGANEX, newly created by consolidating the technology and know-how acquired by Gigaphoton from manufacturing excimer lasers as semiconductor lithography light sources, and combining that technology and know-how with the technology of its customers, can also generate new innovations in fields other than semiconductor lithography as a high performance DUV light source.

### Expected Fields of Application

FPD manufacturing processes, and flexible device manufacturing processes, Semiconductor manufacturing processes

## High Output Excimer Lasers for Laser Annealing

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Because the GIGANEX Series was designed on Gigaphoton's GT platform and devised for maximum universality, it can be expected to be highly reliable. Also, it has inherited the high output and high oscillating frequency that are the characteristics of the GT Series and can be expected to realize designs that are even more suitable for laser annealing.

### ■ High Repetition Type Excimer Lasers

Main Specifications*1	450W Type			600W Type		
Wavelength (nm)	193	248	351	193	248	351
Average Output (W)	450	450	450	600	600	600
Pulse Energy (mJ)	75	75	75	100	100	100
Repetition Frequency (Hz)	6,000	6,000	6,000	6,000	6,000	6,000
Pulse Width (ns)	40 - 100	40 - 100	40 - 100	40 - 100	40 - 100	40 - 100
Stability $\sigma$	< 2%	< 2%	< 2%	< 2%	< 2%	< 2%

Module Maintenance Period	450W Type			600W Type		
Laser Chamber Replacement (Bpls)	60	60	60	60	60	60

Module Maintenance Period	450W Type			600W Type		
Mirror Replacement (Bpls)	60	60	60	60	60	60

Other	450W Type	600W Type
Dimensions (mm)	2,800 x 825 x 2,120 (WxDxH)	2,800 x 825 x 2,120 (WxDxH)
Weight (kg)	3,410	3,410
Product Demo	in preparation <sup>*2</sup>	2017 <sup>*3</sup>
Release Schedule	2017 <sup>*3</sup>	2018 <sup>*3</sup>

## ■ High Output-Low Repetition Type Lasers

Main Specifications <sup>*1</sup>	600W Type			
Wavelength (nm)	193	248	308	351
Average Output (W)	600	600	600	600
Pulse Energy (mJ)	1000	1000	1000	1000
Repetition Frequency (Hz)	600	600	600	600
Pulse Width (ns)	15 - 20	15 - 20	15 - 20	15 - 20
Stability $\sigma$	< 2%	< 2%	< 2%	< 2%

Module Maintenance Period	600W Type			
Laser Chamber Replacement (Bpls)	6	6	6	6
Mirror Replacement (Bpls)	6	6	6	6

Other	600W Type
Dimensions (mm)	2,800 x 825 x 2,120 (WxDxH)

Other	600W Type
Weight (kg)	3,510
Product Demo	TBA
Release Schedule	TBA

- \*1 Please be aware that the main specifications may be changed without prior notice at the company's discretion.
- \*2 If you are interested, please contact a representative of Gigaphoton.
- \*3 Please be aware that this may change due to market demand or at the company's discretion.

## Other

**GIGANEX Series (<https://www.gigaphoton.com/en/products/other/giganex-series>)**



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