



ILLUMINATION

Flat-Top² Generator

FEATURES

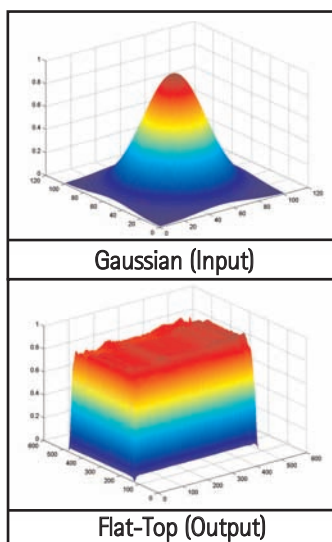
- All glass refractive beam shaper
- Nearly 100% efficiency
- Square or rectangle patterns
- UV, visible and near-IR
- Uniformity down to $\pm 20\%$, peak-to-valley
- Dimension of beam from $150 \times 150 \mu\text{m}$ up to several cm

APPLICATIONS

- Optical character recognition (OCR)
- Night vision
- Bio-detection
- Flow cytometry
- Microscopy
- Printing



GAUSSIAN TO FLAT-TOP USING REFRACTIVE BEAM SHAPING OPTICS



StockerYale's Flat-Top² Generator is a laser beam shaping module that converts a Gaussian beam into a focused, collimated, or diverging flat-top profile. This innovative product can maintain a high degree of uniformity, power, and intensity over large distances.

The Flat-Top² Generator is compatible with lasers that emit at UV, visible and near-IR wavelengths. The module can be easily integrated with our world-renowned Lasiris™ lasers, as well as other laser types, both standard and fiber-coupled.

Ideal for applications requiring tight focusing, uniform illumination, and/or maximum laser throughput.

SPECIFICATIONS

Wavelength range	UV, visible, near-IR
Patterns	Square or rectangle
Uniformity	Down to $\pm 20\%$, peak-to-valley
Dimension of beam	From 150 x 150 μm up to several cm
Output beam characteristics	Focused, collimated, or diverging flat-top beam
Input beam quality	TEM ₀₀ , smooth pattern
Input beam size (1/e ²)	0.5 – 8.0 mm
Transmission	> 90%
Mounting/source	• Single mode fiber • Lasiris™ SNF, TEC, and PTL lasers • M14 0.5 thread option

STANDARD BEAM SIZE INFORMATION

Working Distance (mm)	Beam Size (μm)
30	200, 400, and 600
40	300, 600, and 900
60	450, 900, and 1350
90	600, 1200, and 1800

*Other working distance vs. beam size options available. Please contact us for more details.

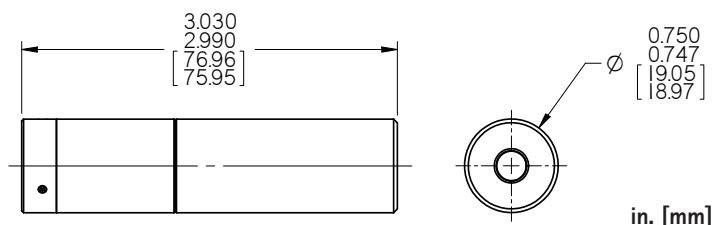
ORDERING INFORMATION

To order a Flat-Top² Generator, please contact a StockerYale representative and provide the following details:

- Wavelength (400–780 nm)
- Pattern type (square or rectangle)
- Dimension of beam
- Output beam type (focused, collimated, diverging)
- Mounting/source

DIMENSIONAL DIAGRAMS

Focused Flat-Top² Generator for the Lasiris™ SNF laser



*Length of the module depends on the mounting/source option selected.
Please contact us for more details.

Patent pending technology

Information and specifications contained herein are deemed to be reliable and accurate. StockerYale reserves the right to change these specifications at any time without notice.



Corporate Headquarters
32 Hampshire Road
Salem, New Hampshire 03079 USA
Tel.: 603-893-8778 Fax: 603-893-5604
www.stockeryale.com

For sales information:
1-800-814-9552
275 Kesmark
Montreal, Quebec
Canada H9B 3J1
Tel.: (514) 685-1005 Fax: (514) 685-3307
www.stockeryale.com/lasers
lasers@stockeryale.com

For international distributors,
call us, or visit
www.stockeryale.com/laser_distributors