

Fiberguide Fiber De-Speckler

Fiber Type:
Round Core
Square Core

Fiberguide's fiber speckle reducer averages the modal noise within an optical fiber. The reduction in speckle can be an ideal choice for Laser Projection, Interferometry, Beam Homogenization, Lithography, Metrology, and Bio-Analytics.

For many fiber coupled applications, modal noise interferes with optimal performance and measurement systems. Fiberguide has developed a miniature mechanical de-speckling system with minimal impact to optical performance, and to reliability. Drive electronics are integrated into the module, but can be provided separately for OEM applications.

Applications

- Laser Projection
- Heads-up Displays
- Laser Beam Homogenizers
- Metrology
- Microscopy
- Interferometry
- Lithography

Mechanical and Electrical Specifications

Mechanical Dimensions	50 mm x 25 mm x 10 mm
Insertion Loss	0.0 dB
Power Supply	+5 Volts
Power Consumption	< 3 Watts
Wavelength *	400nm – 1100nm
Fiber Core Size *	50µm - 400µm

* Customized to OEM applications



Fig 1 Fiberguide De-Speckler

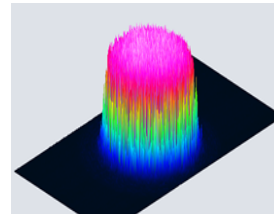


Fig 2A Without De-Speckler

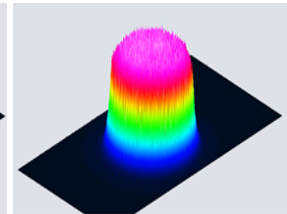


Fig 2B Post De-Speckler

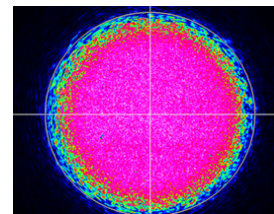


Fig 3A Without De-Speckler

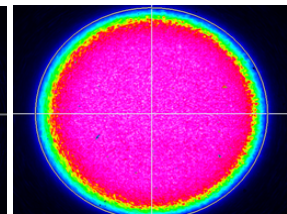


Fig 2B Post De-Speckler