

# fiberlight™ Multicolor Beam Separator

- Compact, ergonomic design
- Generates the beams for one-, two- or three-component LDV or PDPA systems
- Built-in frequency shift capability
- Easy to set up, align and optimize

The **fiberlight** Multicolor Beam Separator is a unique, compact device that generates the laser beam pairs required for one-, two- or three-component Phase/Doppler Particle Analyzer (PDPA) or Laser Doppler Velocimeter (LDV) systems from TSI. Combining the best features of TSI's well-established COLORBURST® Multicolor Beam Separator and Fiber Drive systems, it provides high transmission efficiency while being easy to set up.

When a multicolor argon-ion laser beam is directed through the fiberlight separator, the system output contains three pairs of beams—green (514.5 nm), blue (488 nm) and violet (476 nm). Each pair includes a frequency shifted beam and an unshifted beam. Variable frequency downmixing in the signal processor allows frequency shift selection, a feature unique to TSI systems that enhances overall accuracy, especially for low velocity flow and particle size measurements.



Model FBL-3

New fiber optic couplers simplify fiber coupling yet ensure maximum, repeatable light transmission. A compact size and few operational adjustments make **fiberlight** system set-up and operation easy and straightforward. Since the **fiberlight** system always provides three beam pairs, the ability to naturally expand to a three-component PDPA/LDV system is built-in.

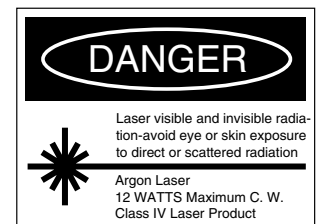
## fiberlight Specifications

Colors separated	476.5 nm, 488 nm, 514.5 nm (violet, blue, green)
Color separation efficiency	100%
User adjustments	Bragg angle, beam steering mirror
Dimensions (L × H × D)	40 × 14.6 × 17.2 cm (15.75 × 5.75 × 6.75 in.)
Weight	7.4 kg (16.3 lb)

## To Order

- FBL-1 fiberlight Multicolor Beam Separator with two fiberoptic couplers
- FBL-2 fiberlight Multicolor Beam Separator with four fiberoptic couplers
- FBL-3 fiberlight Multicolor Beam Separator with six fiberoptic couplers

Specifications subject to change without notice.



### **TSI Incorporated**

**Corporate Headquarters—Tel:** 651 490 2811 **Toll Free:** 1 800 874 2811 **Fax:** 651 490 3824 **E-mail:** fluid@tsi.com

**TSI China—Tel:** +86 10 8260 1595 **Fax:** +86 10 8260 1597 **E-mail:** tsibeijing@tsi.com

Contact TSI or visit [www.tsi.com](http://www.tsi.com) for information on specific office locations worldwide.

