## 0.2 NA FIBER FOCUSING SYSTEM 08-FFS-1

The Model 08-FFS-1 0.2 NA Input Fiber Focusing System is a complete opto-mechanical assembly that provides a stable "industrial strength" means of coupling the output of high power, high divergence lasers into quartz fibers. This system is capable of handling several kilowatts of CW or average power.

## COMPONANT DISCRIPTION

**Aplanatic Focusing Optics**: A 3 element, air-spaced lens, corrected for both spherical aberration and coma, provides a beam waist that is accurately predicted by the product of the focal length (mm) and beam divergence (mrad). A precise focus knob translates the lens without rotating it, therby preventing internal variation of the focal point.

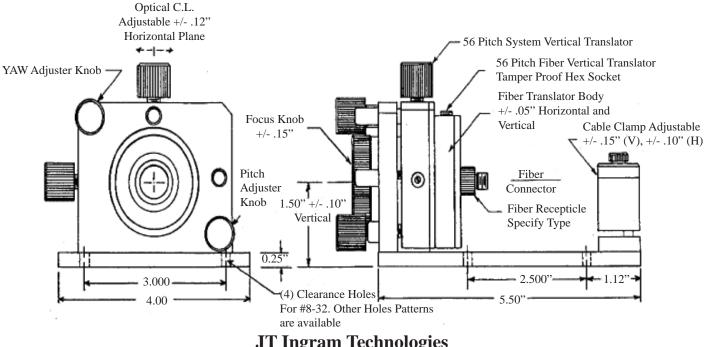
A rugged and stable **Gimbal/Translation Stage**, available with knurled thunb knobs or tamper proof screws provides correct alignment of the focusing optics with respect to the incident beam.

The fiber receptical is held in an **Independant Two Axis Translator**. Tamper Proof 56 pitch drive screws align the fiber face with respect to the lens axis.

A Screw in Screw out Fiber Recepticle is available for SMA, Mitsubishi, D80HPS or other connector types.

A **Cable Clamp** with X/Y Adustment prevents movement of the fiber cable. The "V" type clamp accommodates jacket diameters from 1/4" to 3/4".

MAX Input Beam Diameter	15mm
Fiber N.A.	0.22
Lens Focal Length	37.5mm
Focus (in um) for a 6.3mm dia input beam with	375um
20 mrad divergence after beam expander	



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