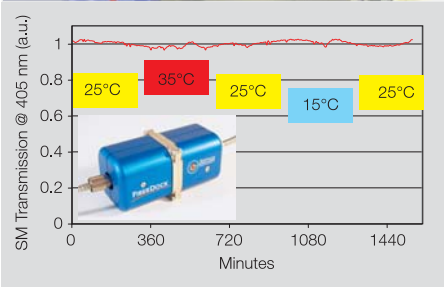


# FiberDock™ and FiberOut

## Universal Fiber Coupler and Fiber Collimator



**Universal fiber coupler.**

**Patented flexure mounts with << 1 μm coupling accuracy.**

**Ultimate thermal stability during temperature cycling.**

### Key features

- Highest single-mode coupling efficiency
- Simple and straight-forward adjustment
- Patented design (US 7,321,706, EP 1,666,944)

### Convenient handling

FiberDock is a conveniently aligned fiber coupler, suitable for both TOPTICA laser systems and third party lasers. FiberOut is a compact, easy-to-use output collimator for any fiber-coupled laser system.

Standard requirements for fiber couplers are a high coupling efficiency, simple and straight-forward handling, plus long-term stability even under changing ambient conditions. TOPTICA's patented FiberDock not only meets these requirements but provides further advantages: it is a compact, rugged coupler designed for easy use, yet providing all required degrees of freedom for maximum coupling efficiencies. Coupling ratios up to 85 % have been demonstrated with single-mode fibers or polarization maintaining fibers, and 90 % have been reached with multi-mode fibers. FC/APC and FC/PC connectors can be used.

The alignment axes (X/Y, Z and Theta) are decoupled, and mechanical hysteresis has significantly been reduced. Once aligned, all axes can be individually locked.

Based on the individual laser parameters such as wavelength (range 350 to 2800 nm) and beam diameter (up to 6 mm), a suitable focusing lens is selected and installed. The FiberDock can be mounted on various adaptors (supplied by TOPTICA) or fixed directly to your laser device.

### Flexible output collimation

Customers who need a collimated output beam for their fiber-coupled laser will appreciate the new FiberOut collimator. The rugged, inexpensive collimator lends itself to both FC/PC and FC/APC-type connectors. It can be equipped with a variety of lenses, matching different fiber mode-field diameters and output beam sizes.

### Specifications

Fiber type	MM, SM, PM
Connector	FC/PC and FC/APC (others on request)
Lens focal length	1 .. 30 mm
Wavelength range	350 nm to 2800 nm
Size	40 x 40 x 41,5 mm <sup>3</sup> (W x H x L)
Coupling efficiency	Up to 85 % in a SM fiber* Up to 90 % in a MM fiber*
Clear aperture	Up to 6 mm (depending on lens)

\*Valid for a Gaussian beam and properly selected coupling lens.