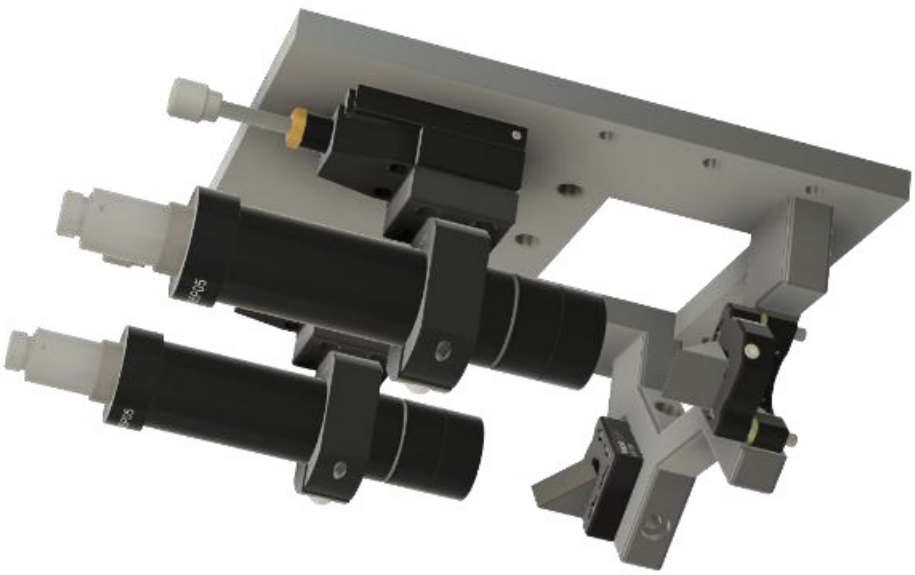
Sub-System Sub-Mini-TLX-FC-(SHG) for TeraLine TD-800/TD-1550

Installation notes

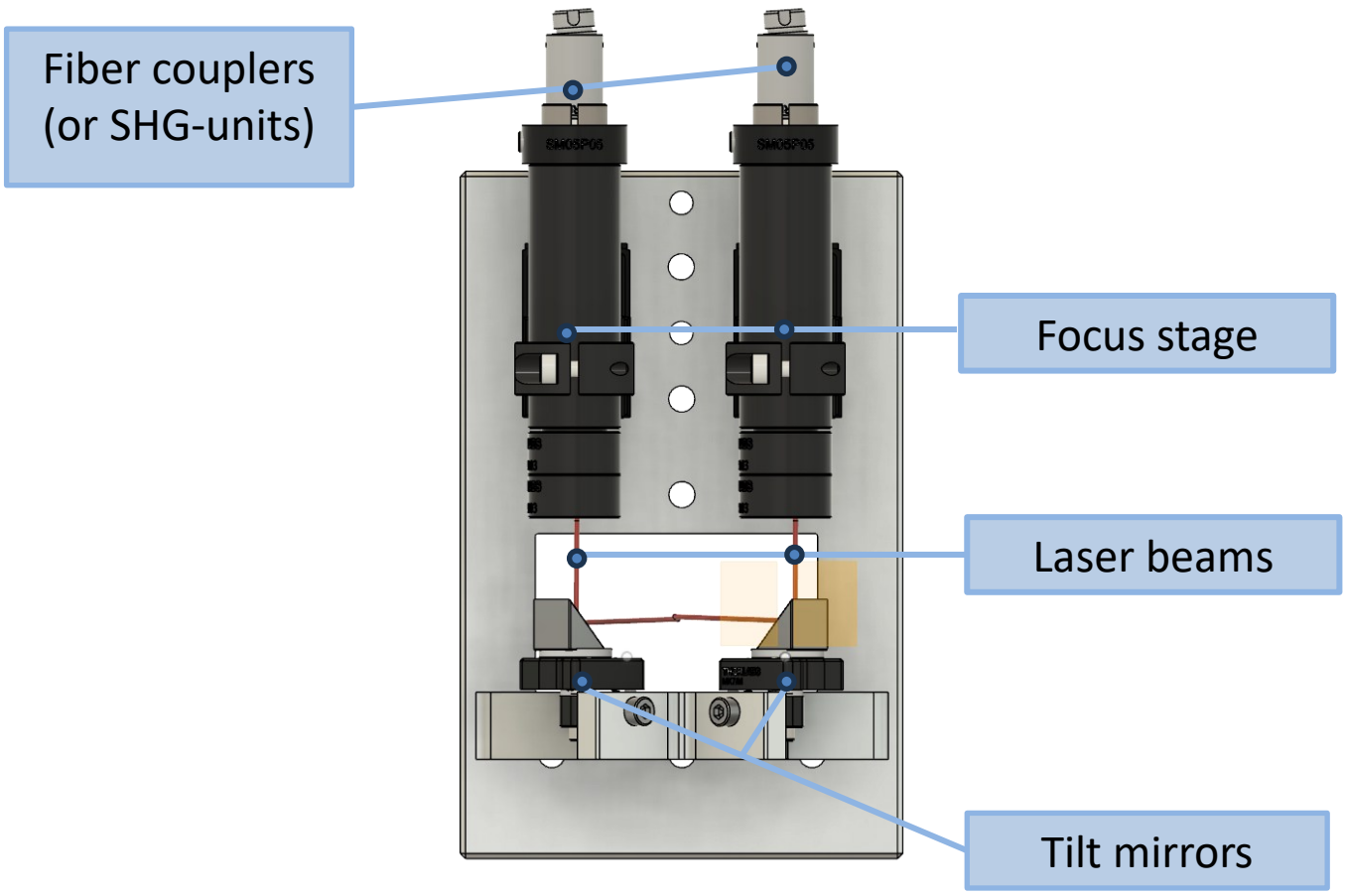


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Overview

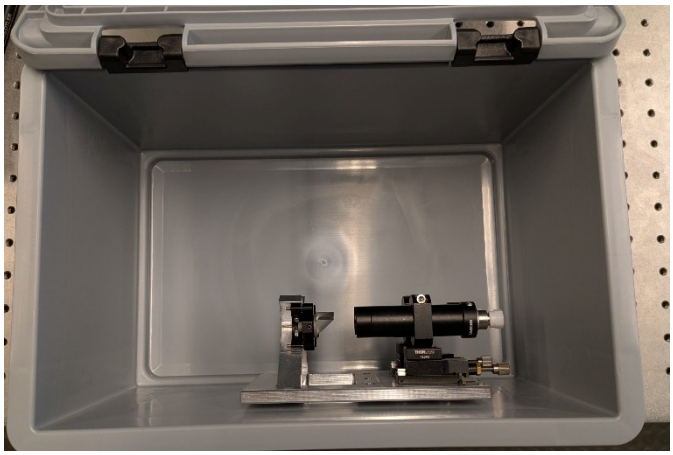
General information:

- The Sub-System Mini-TLX-FC facilitates the integration of the TeraLine on-chip devices into an existing setup. It covers the functions of beam-to-sample alignment and focusing.
- The Sub-System comes pre-aligned on the centered sample window. Hence, only small re-adjustments should be sufficient to compensate variations of excitation of photoconductive switches.
- The fiber couplers can be exchanged by SHG-units (sold separately) in order to operate a TeraLine TD-800 using a 1560nm based laser

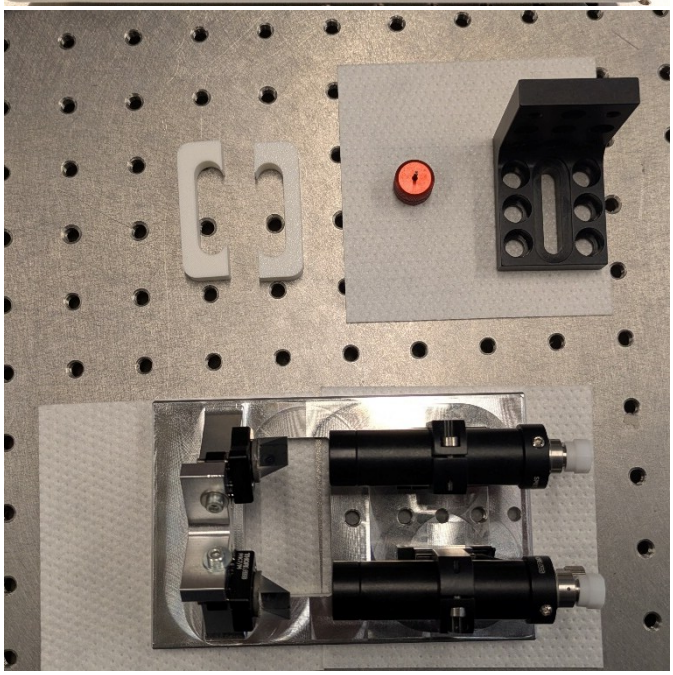


Unpacking

- Before opening, please check the box for visible transport damage. If the box is damaged, please document the defects with pictures to support later insurance claims.
- Open the box and inspect the module to ensure that no damage has occurred during transport. If the module is undamaged, hold it securely by its outer frame and loosen the screws that are inserted through the outer wall of the box.
- Once the screws are removed, you can lift the module out of the box and place it on a flat surface.
- Additionally to the sub-system, the delivery includes a right-angled mounting bracket, an alignment screw for adjusting the tilted mirrors, and an optional sample spacer matching the height of a TeraLine sample.







Unpacking and Installation

- Use the right-angled bracket to attach the sub-system to any mounting frame.
- **Caution**: **Depending on the orientation of the sub-system, the path of the laser beams must be considered carefully before first usage.**
- Before attaching the optical fibers to the fiber couplers, be aware of the laser beam propagation area.
- In the image below you can see that all beams are aligned with the centered sample window.
- You can adjust the beam direction and focus position using the tilted mirrors and the position stages, respectively (right Figure).
- Samples such as the TeraLine series can be mounted on top of the sub-system.
- A top-view alignment camera is a useful tool to ease the alignment procedure of the laser beams on photoconductive switches.

