

FiberKey® P Fiber Coupling Unit for CO₂ with Pilot Laser

FiberKey® P was developed to guide the non-visible light of CO₂ lasers through hollow-core fibers and, simultaneously, transmit the light of a pilot beam. FiberKey® P is used in combination with a newly developed hollow-core fiber: The pilot beam is transmitted through the fiber cladding, the non-visible CO₂ radiation through the hollow-core fiber. In many cases, transmitting CO₂ laser light via optical fibers can replace complex and expensive beam guiding. The product is particularly suited for medical applications involving CO₂ lasers: the cutting of tissue, removing tumors, or in dermatology.



Features:

- Coupling of CO₂-lasers into hollow core fibre
- Power up to 30 Watts
- Visualize target area with integrated pilot laser
- Protected against ESD, reverse polarity
- Wide operating voltage range

Specifications:

- Pilot laser wavelength: 520 nm
- Coupling wavelength: CO₂-Lasers (10.6 µm)
- Customizable mount on for different CO₂-lasers
- Power threshold: up to 30 W
- Coupling efficiency: up to 80% for 1000 µm fiber
- Operating voltage of pilot laser: 8 V to 24 V
- Operating current max. 200 mA
- Storage temperature -10 to +60°C
- Operating temperature +15 to +35°C
- Housing: Aluminum alloy

Drawings:

