

kWIC FIBER CONNECTOR

Groundbreaking kW-Class Fiber Components

The new, innovative Kilowatt Interchangeable Connector (kWIC) is disrupting laser system integration, operation, serviceability, and sustainment by transforming the integral kW-class fiber lasers into line replaceable units. Using the kWIC, fiber laser maintenance can be performed on-site in minutes, versus days, by providing a splice-free disconnect, keeping your system up and running and minimizing disruptions to your operation.

The low insertion loss connection preserves the valuable high brightness output of your fiber laser, maintaining single-mode beam quality and minimizing High Order Mode content. This enables the kWIC to operate continuously, at multiple kW's of power, in strenuous and demanding environments, with no performance degradation and with no need for active cooling. The universal coupling design is compatible with a wide range of Large Mode Area (LMA) optical fibers, including hollow core fiber. This is enabled by the inherent mode-matching and mode field adapting function foundational to the advanced optical architecture of the kWIC.

The low size, weight and power (SWaP) and rugged design - combined with extensive acceptance and environmental testing - make the kWIC broadly applicable and highly reliable, from deployment in mobile military applications to fast-paced industrial factory operations. Maximize manufacturing efficiency and reduce total ownership costs of your next fiber laser system by leveraging the kWIC connector in your platform design and service model.



FEATURES

- Multi-kW output power
- Compatible with all fiber types
- Multiple Polarization Modes
- Near diffraction-limited output

BENEFITS

- Low SWaP for all applications
- Preserves beam quality
- Very low insertion loss
- Flexible system configurations
- No active cooling
- Continuous, full power operation
- Rigorously acceptance tested
- Environmentally tested

APPLICATIONS

- Spectral Beam Combination
- Coherent Beam Combining
- Non-Linear Frequency Conversion
- Ultrafast Beam Delivery
- Optical Communications
- Power Beaming
- Defense
- Advanced Science