

ModeStrip Assemblies - High Power, Low Risk

LASER COMPONENTS introduces ModeStrip assemblies for effective transmission of high-power laser light through optical fibres. With this technology cladding modes no longer pose a threat as the connectors filter undesired modes out of the fibre cladding.

Light transmission in optical fibres is based on the principle of total reflection. Theoretically, the light is reflected multiple times without loss at the interface between the fibre core and fibre cladding. In practice the fibre cable is imperfect, and small amounts of power can enter the fibre cladding (coupling to cladding modes). This is a particular problem in the transmission of high optical power as just 2–3% of the light may be sufficient to destroy the fibre cable.

The mode-strip connector developed by LASER COMPONENTS contains a mode stripper, which strips the optical fibre of its cladding modes and conducts the generated heat away in a controlled manner, via a cooling element, preventing the thermal destruction of the fibre connector.

Fibre cables with ModeStrip connectors are mainly used in high power applications e.g. in laser material processing and optically pumping of fibre lasers. They are also used when a high optical beam quality, without cladding modes, is required or when thermal hotspots must be avoided in the fibre cladding.

More Information

<http://www.lasercomponents.com/uk/fiber-optics/assembled-fibers/>

Trade Shows

Photonex, October 11 - 12, 2017, Ricoh Arena, Coventry, Booth D15

The Company

LASER COMPONENTS specialises in the development, manufacture, and sale of components and services in the laser and optoelectronics industry. At LASER COMPONENTS, we have been serving customers since 1982 with sales branches in five different countries. We have been producing in house since 1986 with production facilities in Germany, Canada, and the United States. In-house production makes up approximately half of our sales revenue. A family-run business, we have more than 200 employees worldwide.