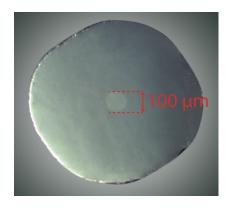
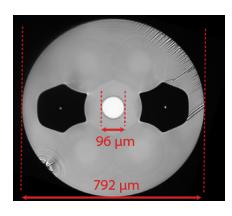
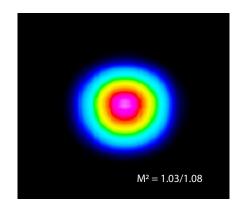
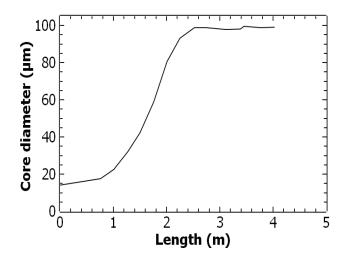
Ultra large mode area ytterbium fiber gain modules

Ampliconyx offers fiber gain modules incorporating company's patent protected ultra large mode area ytterbium doped **tapered double clad fibers** (T-DCF) (US 8,433,168 B2, Japan 5390524, Peoples Republic of China ZL 200880119087.7, EPO 08805462.2 pending), designed for high power ultrafast amplifiers and lasers. Ampliconyx T-DCFs contains largest to date known polarization maintaning ytterbium doped core (100 μ m or even more) operated in single mode regime with perfect beam quality (M² < 1.15).









Key features

- Largest in the world mode field area of 5500 μm²
- Strictly single mode operation with $M^2 < 1.15$
- High gain (30-50 dB)
- High pump absorption (20-30 dB at 976 nm)
- Peak power up to 5 MW
- Low level of nonlinear effects
- Millijoule-level extractable energy
- High threshold of SBS
- Immunity to mode instability



Ultra large mode area ytterbium fiber gain modules

AVAILABLE GAIN MODULES (RANDOM POLARIZATION)

TGModule A

The module includes T-DCF with spliced pump combiner and angle cleaved end face.

TGModule B

The module includes T-DCF with spliced pump combiner and fiber coupled multiplexer.

TGModule C

The module includes the full gain model assembled inside a water cooled aluminum case, ships without pump diodes.

TGModule D

The full module including also the pump diodes. Only external water cooling and power supply unit needed.

AVAILABLE GAIN MODULES (POLARIZATION MAINTAINING)

TGModule A-PM

The module includes polarization-maintaining T-DCF with spliced pump combiner and angle cleaved end face.

TGModule B-PM

The module includes polarization maintaining T-DCF with spliced pump combiner and fiber coupled multiplexer.

TGModule C-PM

The module includes the full polarization maintaining gain model assembled inside a water cooled aluminum case, ships without pump diodes.

TGModule D-PM

The full polarization-maintaning module including also the pump diodes. Only external water cooling and power supply unit needed.

All our modules can be customized, please contact us to start discussion.

