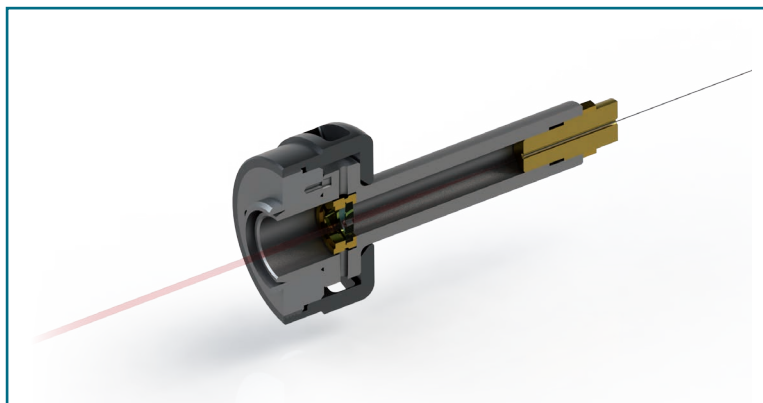


Since 2007, ALPhANOV has built a solid expertise in modelling, designing and prototyping of innovative fiber laser sources and components.



Our PowerPAC connector offers a highly precise connector for single-mode hollow-core fibers (*). It includes a collimator, which can withstand more than 100 Watts of injected power. It is particularly suitable for beam delivery based on hollow-core fibers, for instance in the femtosecond regime.

Features:

- 100W-class in femtosecond regime
- Plug-and-play (high repeatability)
- Passive cooling (active cooling on-demand)

Optical specifications assuming input laser beam with $M^2=1.1$:

Wavelength	1000-1100nm
Max. power input (1)	100W
Maximum loss (1)	20W
Collimated beam diameter (2)	2mm
Divergence	<0.5mrad
Injection loss	<10%
Optical return loss	>40dB
Pointing precision (3;4)	+/-0.1mrad
Beam location precision (3;4)	<0.3mm (of the collimator center)

(1) Considering 80% coupling efficiency in the femtosecond regime

(2) MFD measured at $1/e^2$

(3) Depends on the fiber

(4) Considering 10% loss of the coupling ratio

(*) This connector is also possible for other large core single-mode PCF (Kagome, LMA PCF,...)

Specific high-power, high-precision connector developments on-demand