

# OPTICAL BUNDLES

## FIBER OPTICS & COMPONENTS

**IDIL Fibres Optiques** proposes a wide range of tailor-made optical bundles that depend on a great variety of fibers (single-mode, multi-mode, polarization maintaining...) with different diameters. The company can work from any quantity of fibers (up to several hundred) whatever their material is (all-silica, plastic-clad silica, fluoride, borosilicate glass and all plastic materials optical fibers). Optical fibers whose wavelength ranges from 180 nm to 5500 nm are available. A great variety of numerical apertures is workable with values between 0.10 and 0.66.

**IDIL Fibres Optiques** has its own mechanical process and works on several assembling shapes in order to fit customers' needs. End configurations of optical bundles can be round, square, rectangular in shape, i-e almost any geometry is feasible. Stainless steel and aluminium packaging suit any stand.

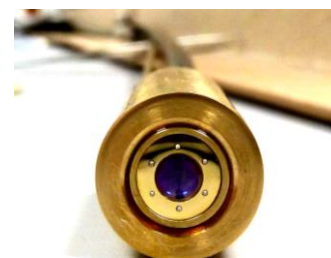
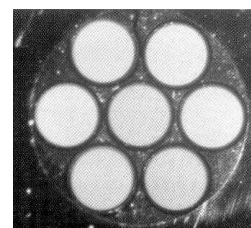
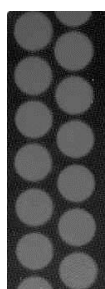
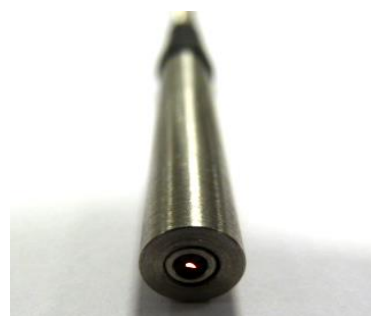
Fibers assembling process can be realized without glue which enables to resist a very high power laser (higher than 1 watt) and specific lenses can be put in front of such assemblies.

It is also possible to realize multi-branch assemblies where fibers are held together on the one end and divided into several branches on the other hand. Positioning of each optical fiber within branches can be precisely determined and implemented in order to meet required distribution at the end.

Several connectors, such as customized ferrules are available.

Do not hesitate to contact the company.

- Some examples of customized optical bundles

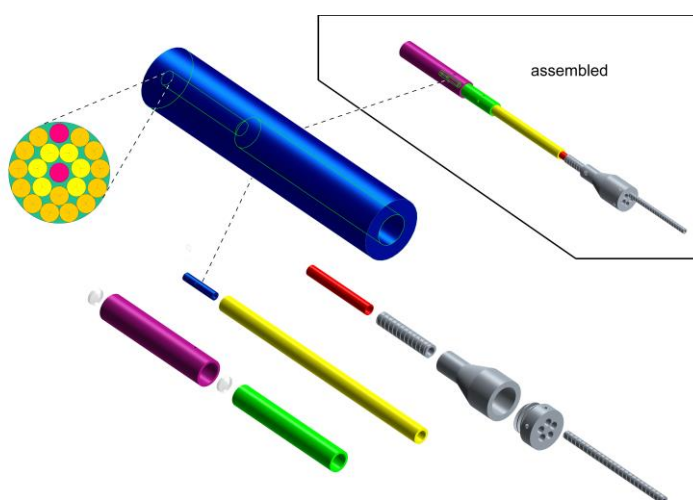




Fiber type	UV, IR, visible or custom <sup>1</sup>
Core diameter	100 µm; 200 µm; 400 µm or custom
Wavelength	From 180 nm to 5500 nm
Numerical apertures	From 0.10 to 0.66
Dimensions	According to the type and the number of fibers
Connectors	FC; LC; SC; SMA; ST; MU; E2000; other <sup>2</sup>
Patchords	Bare fibers; 900µm protection; 2.8mm; others
Fiber material	All-silica; plastic-clad silica; borosilicate glass; fluoride; all plastic materials

## APPLICATIONS

- Spectroscopy
- Sensors
- High power source
- Laser delivery
- Mono-chromators
- Reflective sensors
- Colorimetry
- Pyrometry
- Fluorescence
- Illumination
- Chemical analysis



- Other examples of customized optical bundles.



<sup>1</sup> Please contact us

<sup>2</sup> Ditto