why PROPHOTONIX?

With over 15 years of experience in the design & manufacture of laser diode-based solutions ProPhotonix offers:

- **The latest laser diode technology** - ProPhotonix works directly with engineers & R&D staff at the major laser diode manufacturers and stocks a large inventory of diodes for design flexibility

- **A broad range of configurable products** used as a 'design bank' for custom design enabling faster product-to-market

- **In-house prototype facility** for rapid prototyping

- **In-house production of mechanical components enabling tight control of tolerances** for precision optical alignment

- **Prototype to high volume manufacturing** meeting your demanding and tight specifications

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**Optical Design & Modelling**

ProPhotonix has a dedicated team of highly qualified Optical engineers and has developed thousands of optical systems. We utilize standard design tools to model and create the optimal optical system for you. No matter the complexity of the design, from systems incorporating readily available components to entirely custom designs, we select the most qualified supply chain partners to ensure the highest quality solution for you.

**Mechanical Engineering**

Our in-house team of Mechanical engineers has experience across a wide range of industries and utilizes industry standard software. The engineering team is capable of designing a range of complex assemblies from compact to large intricate laser solutions.

**Control & Communications**

The driver and control electronics of a turnkey laser solution are critical components. Our in-house team of Electronic engineers develops on-board electronics and software providing capabilities such as: strobing, temperature control and optical output monitoring. We develop both Firmware and Software and can work with any communications protocol including Ethernet, Ethercat, USB & Analogue.

When your application requires the optimum laser diode module or collimator solution contact us at photonique.fr@acalbfi.fr - +33 1 60 79 59 07
Fiber-Coupled Laser Diode Modules

why PROPHOTONIX?

Fiber-coupled Laser Diode Modules

With over fifteen years’ experience in photonics, ProPhotonix is the ideal choice of partner for fiber-coupled laser diode modules.

Our custom-designed fiber coupled Laser Modules are:

- Robust
- Highly optically efficient
- Designed to maximize lifetime
- Available with an optical output tailored to your needs
- Designed to be field-replaceable

Access to the latest in Laser Diode Technology

As a laser diode distributor, ProPhotonix has unique access to a wide array of laser diodes to meet your needs. In addition, ProPhotonix works directly with the engineering & R&D teams of premium laser diode manufacturers to gain early access to new diodes released to market.

Robust Solutions

All our fiber-coupled laser modules are designed to maximize optical efficiency and lifetime by reducing the optical components susceptibility to environmental conditions.

ProPhotonix has designed high output power laser modules ensuring the risk of fiber burn is eliminated while providing numerous connector options (including IP65 rated connectors) to protect the fiber against ingress from dust or water. Our laser modules can be designed such that the optical fibers are easily disconnected and reconnected so when laser modules are at 'end of life' they can be quickly and easily removed and replacement modules fitted.

Maximum efficiency with output tailored to your needs

Light output from the modules can be tailored to your exact requirements. ProPhotonix provide arrays of fibers in one dimensional v-groove arrays or using waveguide technologies to output square, rectangular or circular output patterns. These waveguides may be designed to perform many functions including beam concentration and beam coupling.

In-house team of optical, mechanical & electronic engineers

Our in-house mechanical engineers can custom design a fiber-coupled laser module to maximize optical efficiency. Modules have been designed with or without integrated drive electronics. ProPhotonix have the ability to provide a suitable electronic board from its own design bank or our experienced team of electronic engineers will design a custom board to meet your specific needs.

Thermal management & lifetime

For more challenging applications, ProPhotonix have designed custom convection or water-cooled heat sinking for laser modules arrays to meet your operational requirements and extend the fiber-coupled laser module’s lifetime.

If you have a challenging application for fiber-coupled laser diode modules and would like to speak to our experts, contact us at photonique.fr@acalbfi.fr - +33 1 60 79 59 07
Today's challenging applications often demand very detailed and exacting requirements that may not be available from off-the-shelf solutions. For over 20 years ProPhotonix has worked closely with customers to design LED and Laser solutions for their specific application needs. Our goal is to deliver the most precise, efficient and cost effective product for your application. We put all our resources and experience at your disposal to help you meet your targets.

At ProPhotonix our design process starts with the customer requirements. We recognize the importance of understanding every aspect of a customer's specification and our engineers collaborate directly with our customer to ensure that the correct specification is developed.

Once we agree on a full specification, ProPhotonix leverages the expertise of our in-house optical, electronic, thermal, mechanical and software engineers to develop a product concept for your approval. By working closely with our supply chain partners, we ensure prompt delivery of quality prototypes.

One of our key strengths at ProPhotonix is our ability to design and manufacture turnkey solutions. Our ISO certified production facilities offer the flexibility to produce highly complex products in both low and high volume for our global customers. Our processes and procedures ensure that we consistently deliver on time, every time.