Company Information

Founded in 1998, NP Photonics develops and manufactures specialty fiber lasers, fiber amplifiers and transport fibers for the near- and mid-infrared (IR) wavelength bands. Our proprietary fiber technology is used across a broad family of products, including narrow line-width, low phase-noise fiber lasers designed for operation in industrial environments.

Our core strengths are technology innovation, product development, quality engineering and manufacturing world-class products for applications in sensing, defense, metrology and research.

We currently have over 1,500 lasers installed worldwide, and we continue to grow through technology development, strategic partnerships and engagement with markets in which the company has a clear sustainable advantage.

Competencies

NP Photonics’ capabilities run the gamut from innovation in glass chemistry and development of rigorous processes for drawing fiber to the production of high-quality fiber laser systems.

Our environmentally controlled facility, critical to the glass production process, houses unique and customized equipment designed for producing specialty materials and products. This vertical integration allows us to develop and deliver world-class fiber products to exceed customers’ optical and mechanical requirements.

We currently have 32 patents and more in process. These patents relate to glass composition, glass processing, fiber manufacturing, splicing, fiber lasers, fiber components and fiber amplifiers, all at multiple wavelengths across the near- and mid-IR.

Technology Library

Since our inception, NP Photonics has successfully engaged in government-sponsored and customer-funded development programs to leverage core competencies and develop new technologies.

Our engineering team is 20 strong with a deep background in glass, optics and fiber lasers. The team has a wealth of experience developing innovative technologies and bringing products to market.

- Ultra-low-noise, single-frequency technology from continuous wave (CW) to high-energy pulsed lasers, free of non-linear effects
- Distortion-free fiber amplifiers – unique high-gain-per-unit-length phosphate fiber enables significant distortion-free amplification of q-switched and ultrafast pulses at 1 micron and 1.5 microns
- A mid-IR supercontinuum laser source, <1000 nm to >4500 nm
- Ultra-low-loss mid-IR transport fibers, visible-5 microns
- Mid-IR high-temperature oxide glasses

Performance | Reliability | Innovation
Product Portfolio

NP Photonics’ proprietary fiber technology is used across a broad family of innovative products.

- Ultra-low-noise, single-frequency, tunable CW fiber lasers around 1 micron, 1.55 microns and 2 microns
- Distortion-free fiber amplifiers – unique high-gain per unit length non-silica fiber enables ultra-compact, low-latency, distortion-free amplification of q-switched and ultrafast pulses at 1 micron, 1.5 microns and 2 microns
- A mid-IR supercontinuum laser source, <1000 nm to >4500 nm
- Ultra-low-loss mid-IR transport fibers, UV-5 microns

Manufacturing

NP Photonics upholds stringent process control in our state-of-the-art Tucson manufacturing facility.

Our laser products are manufactured in a clean room environment. Our manufacturing operation is driven by product quality and consistency. This is achieved through rigorous process control and production metrics implemented by a highly skilled team of technicians.

Quality

NP Photonics is an ISO 9001:2008 compliant company.

The ISO 9001:2008 certification is a strong demonstration of our commitment to meeting globally recognized quality management system requirements and regulations for the manufacture of fiber lasers, fiber amplifiers and fiber components. We are dedicated to continuous product and process improvement, and to the delivery of the highest quality products to our customers.