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IPG Photonics Corporation, the leader in fiber lasers, announced today at CLEO (the Conference on Lasers and Electro-Optics) that it introduced a compact and low cost platform of picosecond fiber lasers operating at approximately 1070 nm wavelength. The new single-mode laser line is capable of delivering microJoule level energy pulses and is a valuable tool for micromachining, drilling, medical, imaging and scientific applications.

The YLP-PS Series is a Ytterbium fiber laser line (1060-1080 nm) that, in standard configuration, produces single-mode output of up to 10 watts average power with peak powers up to 50 kilowatt and pulse durations of less than 5 picoseconds. Versatile extensions of the source are available and can transform YLP-PS Series into femtosecond, 10 to 100 ps selectable duration, polarization maintaining, microJoule level energy or into broadband "white light" picosecond continuum source broadly operating from 550 to 1800nm with unprecedented spectral brightness.

The unit is compact (290Wx215Hx95D cm), and completely monolithic like all of IPG's ultra-reliable fiber lasers which have been used in manufacturing and other demanding applications for many years. Actively air-cooled, the YLP-PS Series requires no maintenance. Direct modulation of the ultra-reliable pump diode allows modulation of the optical output power within 30kHz bandwidth via a BNC (TTL level) input on the optical module. On the new YLP-PS Series, a build-in digital interface provides simple and reliable control and monitoring of the source parameters.

Offering cost, size and performance advantages over conventional, longer-pulse, solid-state laser systems, the YLP-PS Series is also particularly suitable for materials processing where sub-10 picosecond, high intensity pulses dramatically reduce heat affected zone (HAZ), debris and damage.

About IPG Photonics

IPG Photonics has been a global development pioneer and production leader for over thirteen years in the design and manufacture of high performance fiber lasers, fiber amplifiers, and Raman pump lasers for materials processing, aerospace, test and measurement, and other commercial applications.

IPG's proprietary technology, materials science expertise and vertically integrated manufacturing operations enable IPG to produce the world's largest range of cost-effective high and low power fiber lasers, and amplifiers with superior efficiency, performance, reliability and quality.

IPG Photonics has its world headquarters in Oxford, Massachusetts and manufacturing facilities and sales operations in Massachusetts, Germany, Russia, Italy, Japan, India, Korea and the United Kingdom. For more information, visit http://www.ipgphotonics.com/. IPGP-G

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