

COMING SOON

Reliability redefined

New 30 W
DRY cooled
femtosecond laser
for flat panel display
and microelectronics
fabrication

FemtoLux30

> 30 W at 1030 nm

< 350 fs

Single shot to 4 MHz

Zero maintenance



Advanced Laser Technology

FemtoLux 30

SPECIFICATIONS

- ▶ **>30 W** at 1030 nm
- ▶ **>250 μ J** in a burst mode
- ▶ **<350 fs** – 1 ps
- ▶ **Single shot to 4 MHz** (AOM controlled)
- ▶ **<0.5% RMS power long term stability over 100 hours**
- ▶ **<1% RMS pulse energy stability**
- ▶ **$M^2 < 1.2$ (typical < 1.1)**

FemtoLux 30 is a new 30 W femtosecond industrial grade laser build to work 24/7/365 without any interruptions.

INNOVATIVE COOLING SYSTEM

Other lasers of similar optical power use water for cooling, which means additional bulky and heavy water chiller is needed which require periodical maintenance (cooling system draining and rinsing, water and particle filter replacement). Moreover, in the unfortunate event of water leakage, not only laser head but also more expensive equipment could be damaged. FemtoLux 30 laser uses innovative direct refrigerant cooling (DRC) method that do not contain any water inside the laser head and has much higher cooling efficiency. Laser cooling equipment is integrated together with the power supply unit into a single 4U rack mounted housing with a total weight of just <15 kg.

Release date: first half of 2021

PERFECT AND VERSATILE TOOL

To tailor laser for specific applications, FemtoLux 30 laser has a tunable pulse duration from <350 fs to 1 ps and can operate in very broad AOM controlled range of pulse repetition rate from a single shot to 4 MHz. While max energy of >250 μ J, that could be achieved while operating in a burst mode, could ensure higher ablation rates for different materials.

FemtoLux 30 laser is designed as perfect tool for display and microelectronics manufacturing, as well as for micro processing and marking of brittle materials, such as glass, sapphire or ceramics, as well as for highest quality micro processing of different metals and polymers.

Innovative laser control electronics ensures easy control of FemtoLux30 laser, thus reducing time and human resources required for integrating this laser into different laser equipment.

While high laser reliability and zero maintenance requirement will assure uninterrupted laser operation and fast ROI to the end user of the laser equipment.

FEATURES

- ▶ Zero maintenance
- ▶ Dry cooling (no water used)
- ▶ Robust and sealed laser head
- ▶ PSU and cooling unit integrated into single 4U rack housing
- ▶ Easy and quick installation
- ▶ Versatile laser control possibility
- ▶ Easy drop-in replacement with other lasers
- ▶ Compatible with galvo and Polygon scanners as well as PSO controllers
- ▶ 2 years of total warranty

APPLICATIONS

- ▶ LCD, LED, OLED drilling, cutting and repair
- ▶ Microelectronics manufacturing
- ▶ Glass, sapphire and ceramics micro processing
- ▶ Glass intra volume structuring
- ▶ Micro processing of different polymers
- ▶ Micro processing of different metals
- ▶ Multiphoton imaging
- ▶ OPA pumping