We manufacture diode lasers.

Your ideas are welcome.

Press-Release
February, 2014

High-power 1940nm 200µm Diode Laser for Medical Applications

Lumics GmbH - Berlin is pleased to announce the 1940 nm laser diode source for medical customers. This product is based on the field proven LuOcean Series and delivers at 1940nm an output power of 10W. It is the world’s first laser module for this wavelength which delivers that power level out of a standard silica fiber with only 200 µm fiber core, NA 0.22.

The important water absorption peak at 1940 nm has a five times higher absorption rate compared to the peak at 1470 nm which allows five times lower penetration depth in tissue and is therefore ideally suited for surgery.

The laser diode module is easy to integrate with a single electrical interface with an industry standard D-sub connector and an SMA-905 fiber connector. For medical applications, the unit can be configured with a red or even green pilot beam, thermistor, fiber interlock, monitor diode and user-exchangeable protection window.

Customers can benefit from Lumics reliable single emitter technology with low operating currents compared to laser bars and thus lower heating and cheaper wiring. Operating current and voltage at 10 W is 4.5 A and 20 V and spectral width of light is 10 nm. Unit size is 180 mm x 80 mm. The module operates from 15 °C to 40 °C even with air force cooling.

Lumics upon request can offer all LuOcean laser modules also with a laser diode driver as a compact, turnkey solution. The LuOcean series comprises diode lasers with different footprints from 793–1940nm with output powers from few Watt up to 900 W.

Lumics GmbH in Berlin is a manufacturer of single and multimode laser diodes, laser diode modules and turn key laser systems, based on Lumics' patented single emitter technology.

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