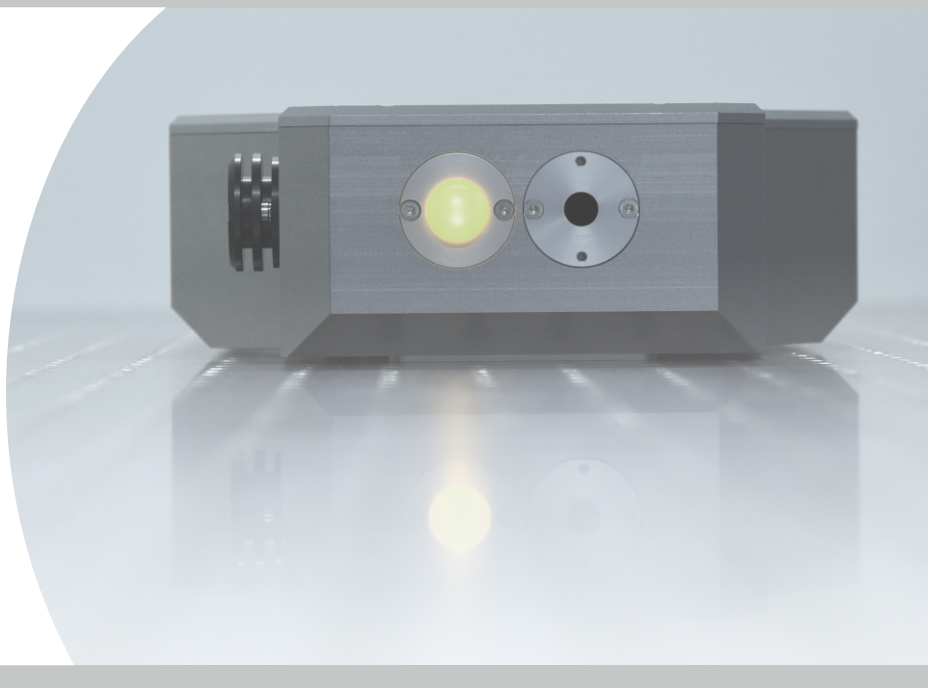
Xiton Photonics



# IXDICE 1342

**Diode laser pumped**
**Q-switched solid-state laser**
**Wavelength 1342 nm**

## General description

The IXDICE 1342 is a high repetition rate solid-state diode pumped Q-switched lasers with the unique fundamental wavelength of 1342 nm. It is the successor of the IDOL-C-1342 laser in a more compact laser housing.

The laser is optimized for high pulse repetition rates in the range 40 to 200 kHz to allow high throughput in material processing applications. Due to its high pulse-to-pulse stability and the sealed housing the IXCDICE 1342 is well suited for continuous 24/7 industrial use.

With a wavelength of 1342 nm, the IXDICE 1342 is a perfect choice as a laser tool for silicon processing like stealth dicing or trimming of integrated circuits.

The revised design also provides compliance to US CDRH regulations.

## Applications

**Stealth dicing**
**Wavelength sensitive processes**
**Silicon processing**
**Micro-machining**

## Features

**High repetition rate**
**Graphical user interface**
**LabVIEW libraries**
**CDRH compliance**

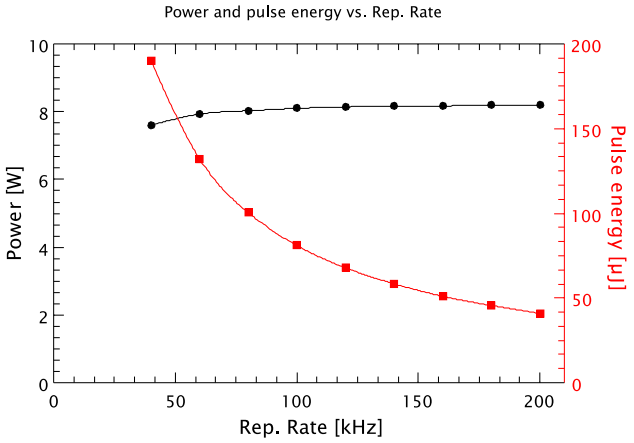
## Product specifications

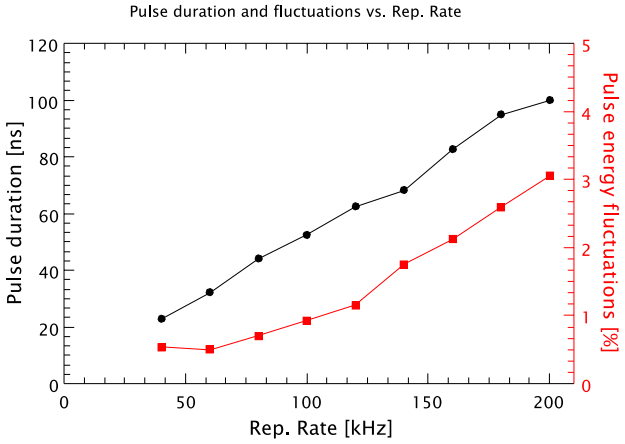
| | |
|---|---|
| **Model** | IXDICE 1342 |
| **Wavelength** | 1342 nm |
| **Average power** | 8 W |
| **Pulse duration** | approx. 50 ns |
| **Energy per pulse** | 80 µJ |
| **Repetitipon rate** | 40-200 kHz |
| **$M^2$** | 1.2 |

Data at 100 kHz pulse repetition rate.
Specifications are subject to change without notice due to product improvement.

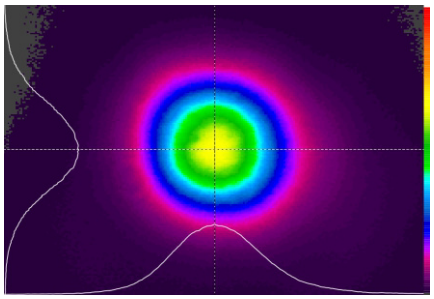
# IXDICE 1342

## Typical performance

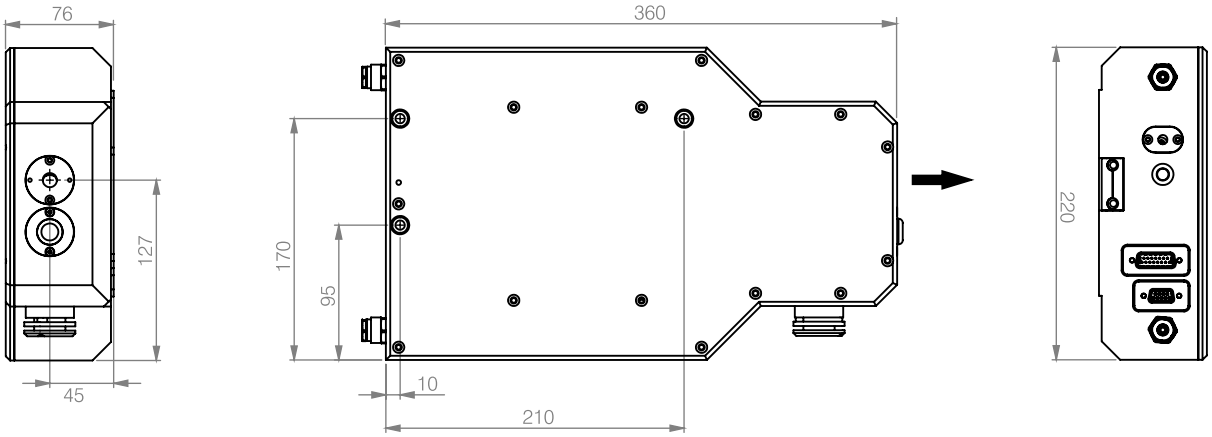



## Typical beam profile



## Dimensions laser head




## System dimensions (L x W x H), weight

| | | |
|---|---|---|
| **Laser head** | 360 x 220 x 76 mm³ | 10.5 kg |
| **Power supply** | 447 x 440 x 134 mm³ | 18.0 kg |
| **Chiller** | 447 x 381 x 134 mm³ | 12.0 kg |

## Electrical characteristics

| | |
|---|---|
| **Operating voltage** | 85-264 VAC |
| **Frequency** | 47-63 Hz |
| **Power consumption** | 120 W typ |

Complies with 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007

Class 4 laser (IEC 60825-1)

**Xiton Photonics GmbH**
**Kohlenhofstrasse 10**
**D-67663 Kaiserslautern**
**Germany**

**Tel.: +49 (0)631 414 9944-0**
**Fax: +49 (0)631 414 9944-9**
**sales@xiton-photonics.com**
**www.xiton-photonics.com**