Xiton Photonics

NEW PRODUCT 2023

IXDICE ULTRA 1342

Diode laser pumped
Q-switched solid-state laser
Wavelength 1342 nm
Average power 18 W

General description

The IXDICE Ultra 1342 is a high repetition rate all-solid-state diode pumped Q-switched laser with the unique fundamental wavelength of 1342 nm. It is the amplified high power version of the IXDICE 1342 laser. With an average output power of 18 W it is the most powerful system on the market at this special wavelength.

The laser is optimized for high pulse repetition rates in the range 30 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 Ultra 1342 is well suited for continuous 24/7 industrial use.

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

Applications

Stealth dicing
Wavelength sensitive processes
Silicon processing
Micro-machining

Features

High repetition rate, up to 200 kHz
Graphical user interface
LabVIEW libraries
CDRH compliance

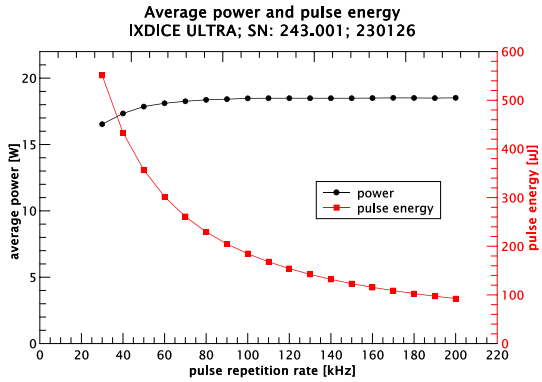
Product specifications

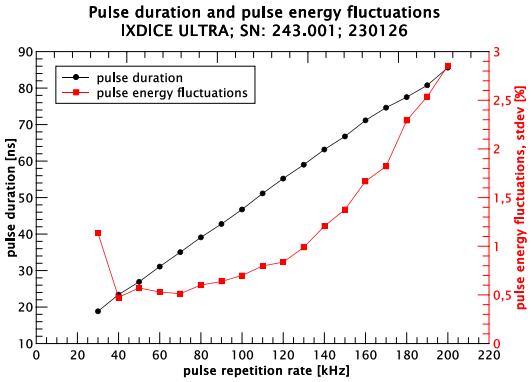
Model	IXDICE 1342
Wavelength	1342 nm
Average power	18 W
Pulse duration	typ. 40-50 ns
Energy per pulse	500 µJ @ 30 kHz
Repetitipon rate	30-200 kHz
M^2	< 1.3

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

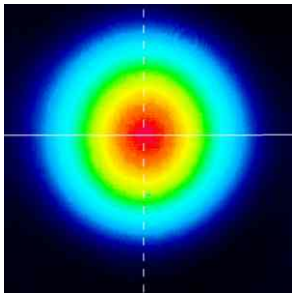
IXDICE ULTRA 1342

Typical performance

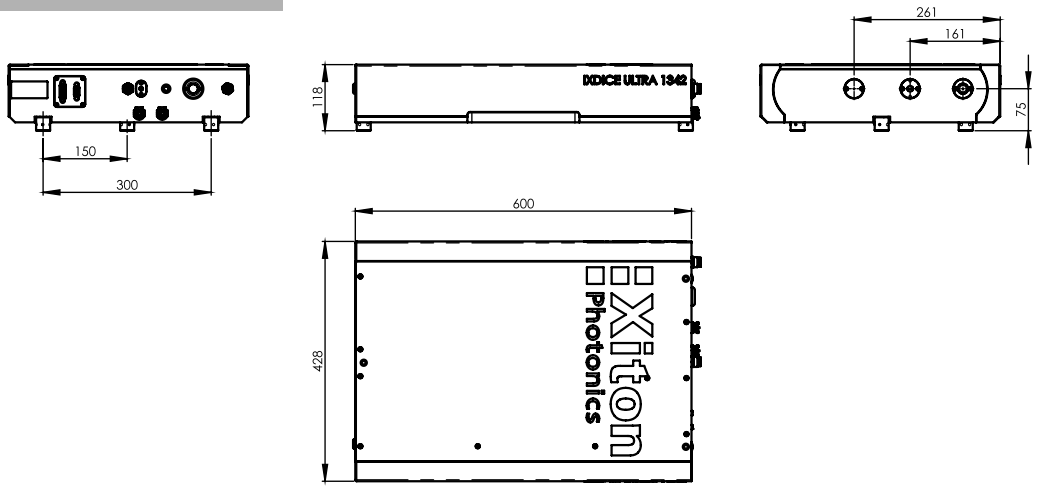




Typical beam profile



Dimensions laser head



System dimensions (L x W x H), weight

Laser head	600 x 428 x 118 mm³	39.0 kg
Power supply	528 x 483 x 134 mm³	18.0 kg
Chiller	611 x 482 x 134 mm³	16.6 kg

Electrical characteristics

Operating voltage	85-264 VAC
Frequency	47-63 Hz
Power consumption	600 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