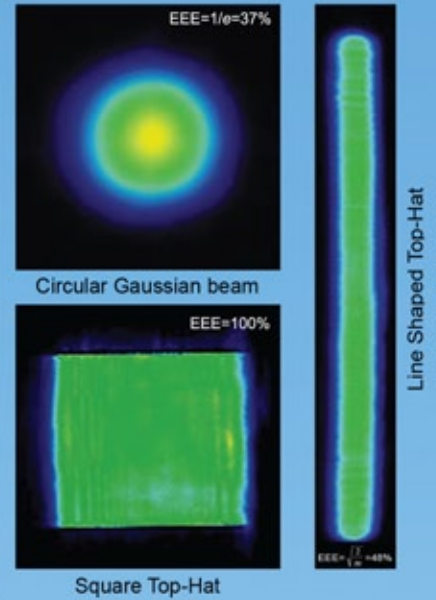


INNOSLAB Lasers IS-Series

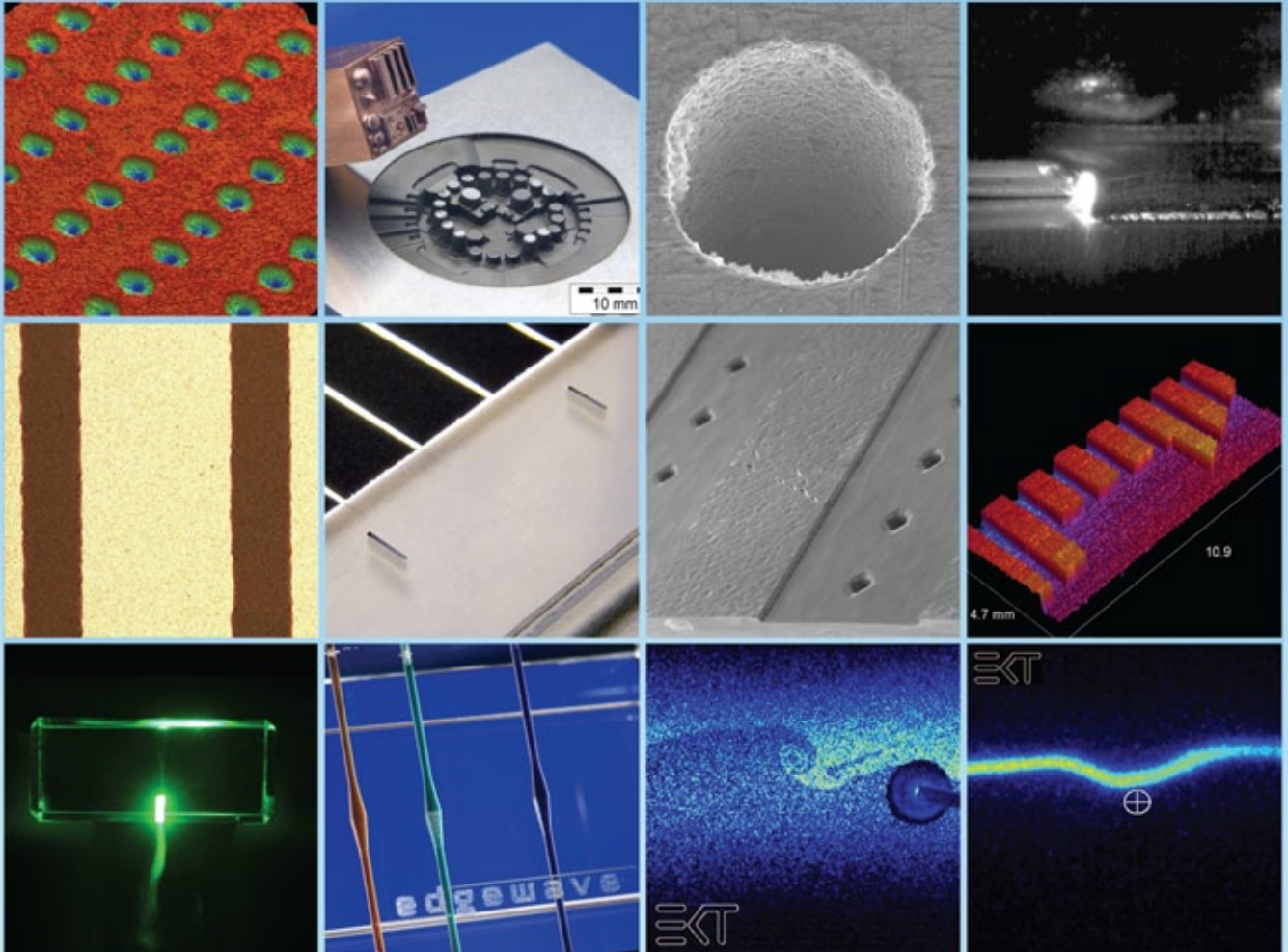


Unique features

- short pulse
- high pulse energy
- high peak power
- high repetition rate
- compact setup
- flexibility on crystal choice
- tailored beam profile

Favourable applications

- structuring
- ablation and scribing
- precision drilling
- solar cell processing
- glass processing
- pumping of dye laser, OPA, OPO
- PIV and LIF



Specifications of IS-Series

Output Beam	IS4I-E	IS8I-E	IS16I-E	IS20I-E
Nd doped	YVO4/YAG/YLF	YVO4/YAG/YLF	YVO4/YAG	YVO4/YAG
Wavelength [nm]	1064/1064/1047	1064/1064/1047	1064/1064	1064
Beam quality	$M^2 < 2$	$M^2 < 2$	$M^2 < 2$	$M^2 < 2$
Average power [W]	40/40/40	100/80/80	160/140	200/160
max. repetition rate [kHz]	100/30/10	100/30/10	100/40	100/40
Pulse energy* [mJ]	3/5/9	6/14/30	8/20	8/20
Pulse width* [ns]	7/9/11	6/7/7	6/7	6/8
Energy stability* [%] rms	< 2	< 2	< 2	< 3
Timing stability* [ns]	< 5	< 5	< 5	< 5
Polarisation	> 1:100	> 1:100	> 1:100	> 1:100
Beam ellipticity (far field) [%]	< 10	< 10	< 10	< 10
Diameter at window [mm]	5	5	5	5
Divergence full angle [μrad]	< 360	< 360	< 360	< 360
Point stability [μrad]	< 72	< 72	< 72	< 72
Warm-up time, from cold start [min]	< 15	< 15	< 15	< 15
from standby [min]	< 5	< 5	< 5	< 5

Output Beam	IS4II-E	IS8II-E	IS4II-DE	IS6II-DE
Nd doped	YVO4/YAG/YLF	YVO4/YAG/YLF	YVO4/YAG/YLF	YVO4/YAG
Wavelength [nm]	532/532/523	532/532/523	532/532/523	532/532
Beam quality	$M^2 < 2$	$M^2 < 2$	$M^2 < 2$	$M^2 < 2$
Average power [W]	20/20/16	40/40/40	2 x 20/20/16	2 x 26/26
max. repetition rate [kHz]	100/20/10	100/20/10	100/20/10	100/20
Pulse energy* [mJ]	1/2/5	2/5/12	2 x 1/2/5	2 x 2/5
Pulse width* [ns]	6/8/10	5/7/9	9/10	8/10
Energy stability* [%] rms	< 3	< 3	< 3	< 4
Timing stability* [ns]	< 1 ns	< 1 ns	< 1 ns	< 1 ns
Polarisation	> 1:100	> 1:100	> 1:100	> 1:100
Beam ellipticity (far field) [%]	< 10	< 10	< 10	< 10
Diameter at window [mm]	5	5	0,9	1
Divergence full angle [μrad]	< 180	< 180	< 1200	< 1200
Point stability [μrad]	< 36	< 36	< 240	< 240
Warm-up time, from cold start [min]	< 20	< 20	< 20	< 20
from standby [min]	< 7	< 7	< 7	< 7

* Nd:YVO4 @ 5 kHz, Nd:YAG @ 2 kHz, Nd:YLF @ 1 kHz

EdgeWave follows a policy of continuous product improvement. Specifications are subject to change without notice.

edgewave

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