

PX-Series

Ultrashort Pulse InnoSlab Lasers

EDGEWAVE

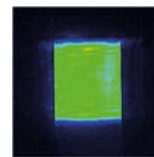
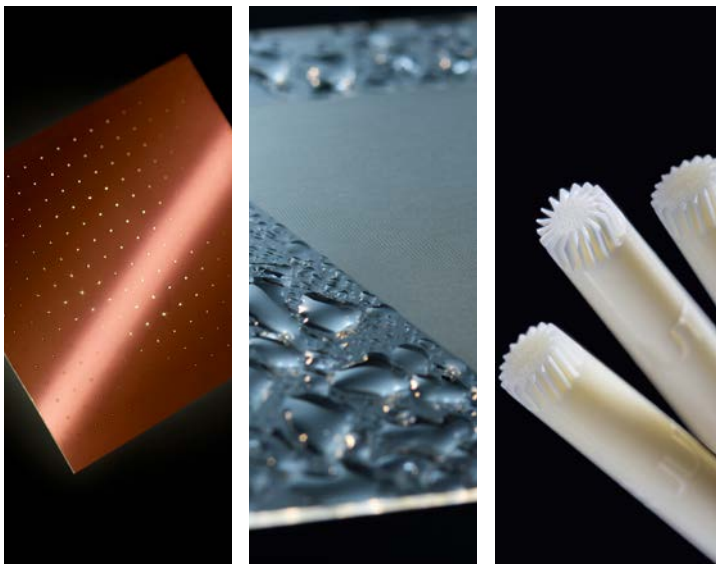


Favourable Applications

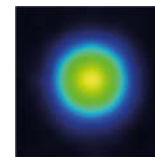
- milling, cutting and drilling of display-glass, sapphire, ceramic, etc.
- ablation and structuring of thin layer
- precision 3D engraving/milling
- drilling and cutting of CFP
- laser induced selective etching
- rapid prototyping

Unique Features

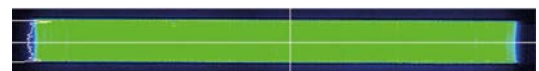
- ultrashort pulse
- high pulse energy
- high peak power
- high repetition rate
- burst mode
- compact setup
- tailored beam profile



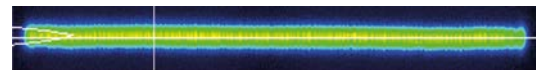
square top-hat



circular gaussian



rectangular top-hat



line shaped top-hat

Overview of PX-Series

Model	PXxxx-1	PXxxx-2	PXxxx-3	PXxxx-4
Wavelength [nm]	IR	Green	UV	DUV
Highest beam quality M ²	1.1	1.1	1.1	1.1
Max. average power [W]	400	200	90	15
Max. repetition rate [MHz]	100	100	100	100
Max. pulse energy [μJ]	1400	700	340	170
Pulse width [ps]	12	12	12	12
Energy stability [%] rms	1	2	2	3
Timing stability [ns]	20	20	20	20
Polarisation	> 100:1	> 100:1	> 100:1	> 100:1
Beam ellipticity (far field) [%]	< 10	< 10	< 10	< 10
Diameter at window [mm]	3	3	3	3
Full divergence angle [μrad]	500	250	226	226
Point stability [μrad]	< 50	< 50	< 50	< 50
Warm-up time from cold start [min]	15	20	30	30
Warm-up time from standby [min]	10	15	30	30

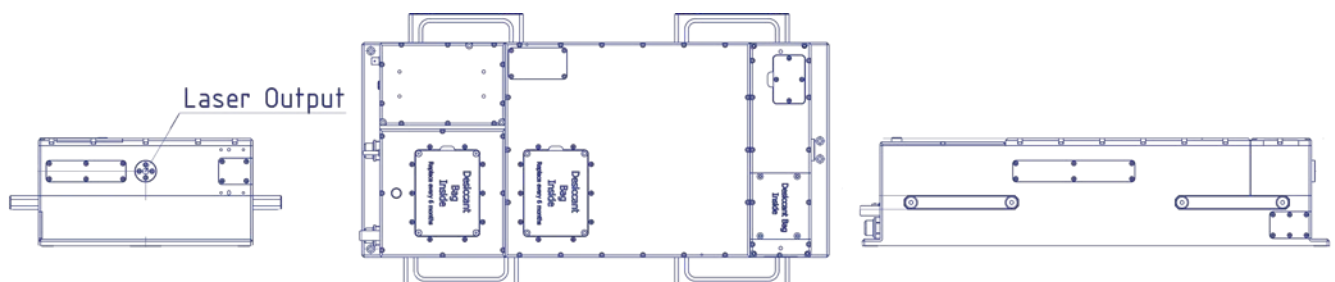
Utility & Ambient Requirements

Power supply	90 V-264 V or 180 V-264 V, 50/60 Hz
Power	1.2 kW-3.6 kW
Chiller	230, 208, 115, 100 V, 50/60 Hz
Power	0.8 kW-3.6 kW
Operation ambient temperature	15 °C-35 °C
Relative humidity, non-condensing	10 %-80 %

Dimensions & Weights

Laser head	650 mm x 298 mm x 150 mm
Supply incl. chiller	19" x (10 HU-15 HU) x 700 mm
Laser head	< 50 kg
Supply incl. chiller	62 kg-110 kg

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



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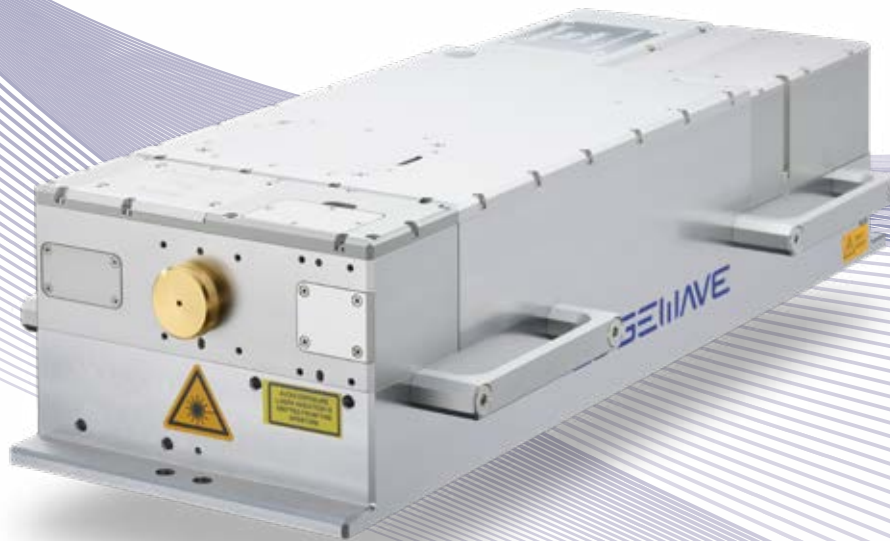
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PXz-Series

Short Pulse InnoSlab Lasers

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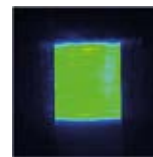
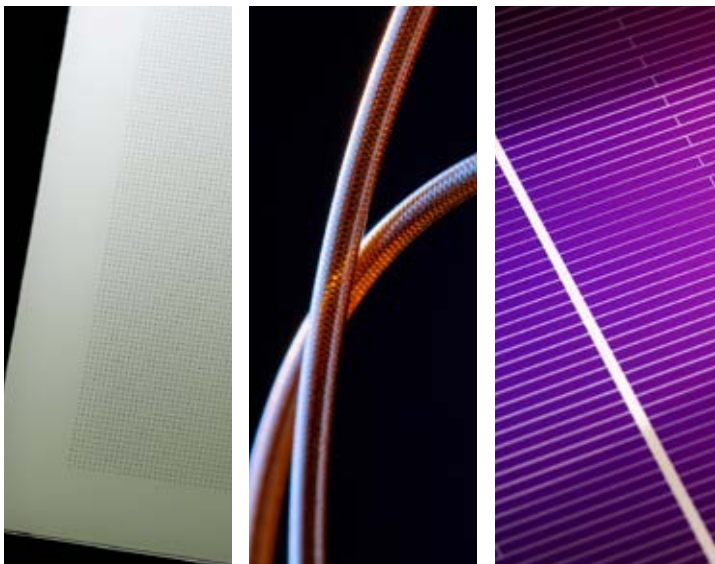


Favourable Applications

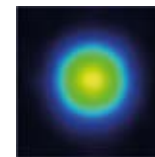
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- drilling and cutting of CFP
- laser induced selective etching
- rapid prototyping

Unique Features

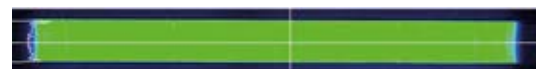
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- high pulse energy
- high peak power
- high repetition rate
- burst mode
- compact setup
- tailored beam profile



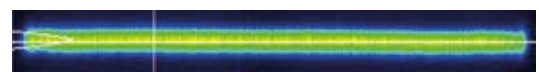
square top-hat



circular gaussian



rectangular top-hat



line shaped top-hat

Overview of PXz-Series

Model	PXxxx-1	PXxxx-2	PXxxx-3	PXxxx-4
Wavelength [nm]	IR	Green	UV	DUV
Highest beam quality M ²	1.1	1.1	1.1	1.1
Max. average power [W]	100	50	30	3
Max. repetition rate [MHz]	100	100	100	100
Max. pulse energy [μJ]	500	250	150	100
Pulse width [ps]	12-80	12-80	12-80	12-80
Energy stability [%] rms	1	2	2	3
Timing stability [ns]	20	20	20	20
Polarisation	> 100:1	> 100:1	> 100:1	> 100:1
Beam ellipticity (far field) [%]	< 10	< 10	< 10	< 10
Diameter at window [mm]	3	3	3	3
Full divergence angle [μrad]	500	250	226	226
Point stability [μrad]	< 50	< 50	< 50	< 50
Warm-up time from cold start [min]	15	20	30	30
Warm-up time from standby [min]	10	15	30	30

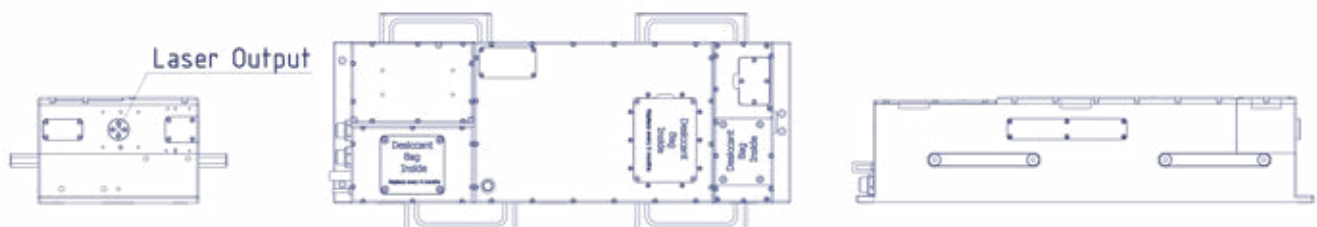
Utility & Ambient Requirements

Power supply	90 V-264 V or 180 V-264 V, 50/60 Hz
Power	600W W-1.2 kW
Chiller	230, 208, 115, 100 V, 50/60 Hz
Power	0.8 kW-1.6 kW
Operation ambient temperature	15 °C-35 °C
Relative humidity, non-condensing	10 %-80 %

Dimensions & Weights

Laser head	650 mm x 228 mm x 150 mm
Supply incl. chiller	19" x (10 HU-15 HU) x 700 mm
Laser head	< 42 kg
Supply incl. chiller	40 kg-45 kg

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PX600-Series

Ultrashort Pulse InnoSlab Lasers

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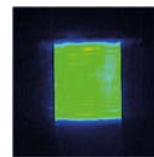
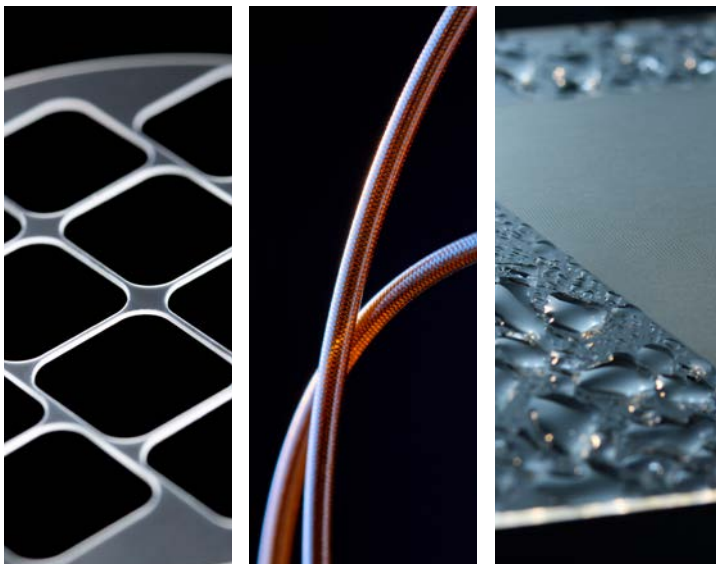


Favourable Applications

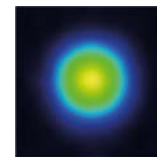
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- precision 3D engraving
- milling, drilling and cutting of CFP
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- rapid prototyping

Unique Features

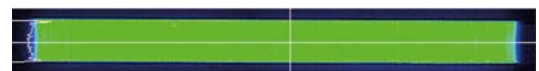
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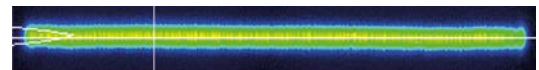
square top-hat



circular gaussian



rectangular top-hat



line shaped top-hat

Overview of PX600-Series

Model	PXxxx-1	PXxxx-2	PXxxx-3	PXxxx-4
Wavelength [nm]	IR	Green	UV	DUV
Highest beam quality M ²	1.1	1.1	1.1	1.1
Max. average power [W]	600	250	120	20
Max. repetition rate [MHz]	100	100	100	100
Max. pulse energy [μJ]	2000	1000	500	250
Pulse width [ps]	12	12	12	12
Energy stability [%] rms	1	2	2	3
Timing stability [ns]	20	20	20	20
Polarisation	> 100:1	> 100:1	> 100:1	> 100:1
Beam ellipticity (far field) [%]	< 10	< 10	< 10	< 10
Diameter at window [mm]	3	3	3	3
Full divergence angle [μrad]	500	250	226	226
Point stability [μrad]	< 50	< 50	< 50	< 50
Warm-up time from cold start [min]	15	20	30	30
Warm-up time from standby [min]	10	15	30	30

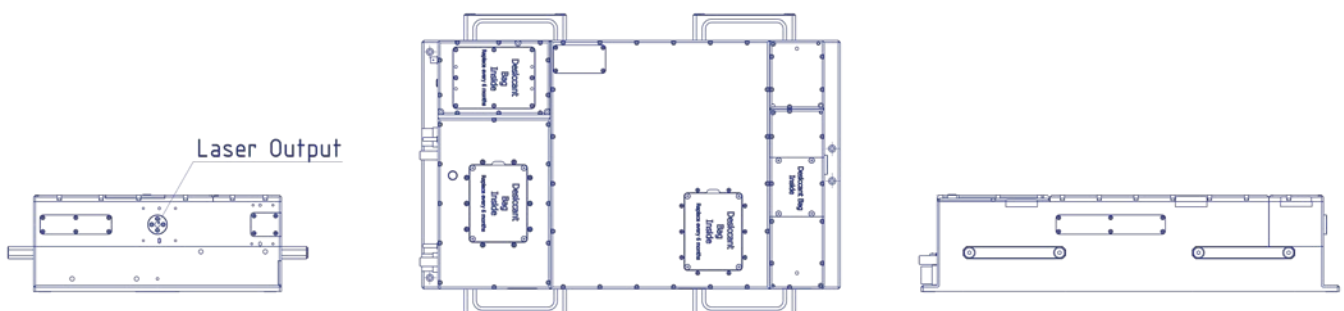
Utility & Ambient Requirements

Power supply	90 V-264 V or 180 V-264 V, 50/60 Hz
Power	3.6 kW-7 kW
Chiller	230, 208, 115, 100 V, 50/60 Hz
Power	1 kW-7 kW
Operation ambient temperature	15 °C-35 °C
Relative humidity, non-condensing	10 %-80 %

Dimensions & Weights

Laser head	650 mm x 385 mm x 150 mm
Supply incl. chiller	19" x (10 HU-15 HU) x 700 mm
Laser head	63 kg
Supply incl. chiller	62 kg-110 kg

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