

# Preludio-Ultra

by *fibercryst*

## Preludio-Ultra

Your solution for high-precision industrial applications



PRELUDIO-Ultra combines a compact footprint with powerful 35 W ultrafast performance, operating at 1 MHz\* and delivering record-short pulses of  $\leq 100$  fs for next-generation industrial applications

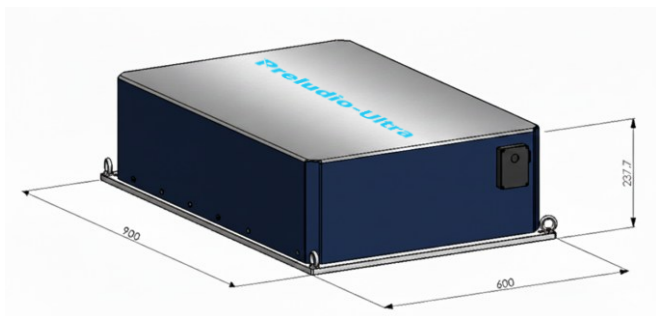
### Industrial & Scientific Applications

- Precision micromachining
- Electronics & semiconductors
- Medical devices
- Surface texturing
- Glass & transparent materials
- Energy & batteries
- Scientific research & advanced photonics

Ultrashort pulses. Maximum precision. Minimal thermal impact.

\*up to 5 MHz available upon request

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# Preludio-Ultra

## Specifications

### Performances

|                                | Preludio-Ultra          |
|--------------------------------|-------------------------|
| Average Power                  | 35 W                    |
| Repetition Rate <sup>(a)</sup> | 1 MHz                   |
| Pulse Energy                   | Up to 35 $\mu$ J        |
| Central wavelength             | 1030 nm $\pm$ 2         |
| Spectral range                 | 60 nm @ -20dB           |
| Polarization direction         | vertical                |
| Pulse duration <sup>(b)</sup>  | < 80 fs                 |
| Beam diameter                  | Tunable, from 1 to 5 mm |
| Beam Ellipticity               | $\geq 0.85$             |
| Beam Quality (X/Y)             | $M^2 \leq 1.3$          |
| Warm-up time                   | < 30 min                |

(a) up to @ 5 MHz upon request - (b) Down to 40 fs upon request

### Characteristics

|                       |                   |
|-----------------------|-------------------|
| Footprint (L x l x h) | 90 x 60 x 23.8 cm |
| Weight                | 104 kg            |
| Cooling               | Water-cooled      |

## Features

Prechirp for transport dispersion

## Highlights

PSO

Position Synch. Output

*All-in-One Box*

Fully integrated laser head with electronics

Section intended for official distributors and partners

