

Satsuma Niji

Fully customizable and versatile femtosecond laser

Satsuma Niji is an industrial laser platform offering all possible wavelengths from 257 nm and up to 4000 nm. Satsuma Niji breaks free from the restrictive wavelengths choices available today and offers a whole new parameter space for ultrafast processing optimization. Fully customizable with up to 4 simultaneous outputs, Amplitude takes pride in delivering the most application focused ultrafast laser to date.

The small footprint, squat design offers unmatched long term stability and performances while easing system integration in medical or industrial machinery.

Satsuma Niji represents a major simplification combining multiple lasers into one allowing major breakthroughs in selective and highly demanding medical and industrial applications.

Satsuma Niji is based on the industry leading Satsuma fiber laser. It benefits from 10 years of product improvements from over 2000 units installed in factories, hospitals and research laboratories.



Applications

- > Selective ablation
- > Display repair
- > Silicon processing
- > Medical

Key Features

- > Up to four simultaneous wavelengths
- > Femtosecond pulses for maximum precision and minimal HAZ
- > Fully customizable

Specifications

Wavelength	Fully customizable with up to 4 simultaneous outputs from 257 nm to 4000 nm
Average Power	Up to 20 W*
Pulse Energy	Up to 40 μ J*
Repetition Rate	From single shot to 2 MHz
Pulse Duration	50 fs < $\Delta \tau$ < 350 fs
Long term power stability	< 1% rms

*depends on selected wavelength(s) and repetition rate

Dimensions

Laser Head	52 x 33 x 20 cm
Power Supply	4U rackable

Weight

Laser Head	< 40 kg
Controller	15 kg

Options

- Output power monitoring for four wavelengths
- Burst mode - pulse train with 25 ns period
- Superior beam - astigmatism > 90% and waist symmetry > 95%
- Up to 40 MHz repetition rate

