

For every industrial need

# Satsuma

*Versatile, full-featured and compact femtosecond laser*

The Satsuma family of femtosecond laser offers versatility in the most compact air-cooled laser platform on the market. Satsuma is a cost-efficient solution providing high repetition rate and high energy, up to 150  $\mu$ J.

Versatile and full-featured, Satsuma femtosecond lasers are equipped with: FemtoBurst™ (choose number of pulses, rhythms, time between each pulse from 25 to 100 ns); the trigger on demand for selecting individual pulses, and SuperSync Control for getting more precise synchronization with a high speed scanning system. Satsuma femtosecond laser is available with green, UV and deep UV outputs.

With more than 1 500 Satsuma installed around the world, this laser product range is a best-seller. Our customers highly appreciate the ease of integration, and its unsurpassed engraving quality.

Satsuma is part of Amplitude's femtosecond laser range, internationally-recognized as reliable and stable. Their very short pulse widths lead to both the lowest heating effect on the market and the best ablation efficiency, reaching an unparalleled process quality.



## Applications

### Industry:

- > Microelectronics
- > Micromachining
- > Flat Panel Display Repair

### Science:

- > Multiphoton Imaging
- > Optogenetics
- > Ultrafast Spectroscopy

### Medical:

- > Ophthalmology
- > Medical Device Manufacturing

## Key Features

- > Air-cooled up to 20 W
- > FemtoBurst™
- > Trigger on demand - FemtoTrig™
- > SuperSync Control
- > Optional green, UV and DUV outputs
- > Industrial design for 24/7 operation



# Specifications

	Satsuma	Satsuma HP	Satsuma HP <sup>2</sup>	Satsuma HP <sup>3</sup>
Average Power	> 5 W	> 10 W	> 20 W	> 50 W
Energy Per Pulse	> 10 μJ	> 20 μJ	> 40 μJ / 150 μJ	
Pulse Width	< 350 fs to > 10 ps			
Repetition Rate	From single shot to 40 MHz			
Central Wavelength	1030 +/- 5 nm			
Beam Circularity	> 87 %			
Beam Pointing Stability	<25 μrad/°C			
Long Term Mean Power Stability	< 1 % rms over 100 hours			
Warm-up Time	< 30 min			

## Dimensions

All Models	52 x 33 x 12 cm
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## Weight

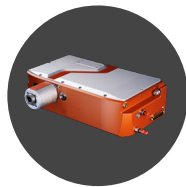
All Models	23 kg
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## Cooling

Satsuma, HP, HP <sup>2</sup>	Air-cooled
Satsuma HP <sup>3</sup>	Water-cooled

# Options

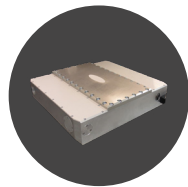
High Energy Option available.



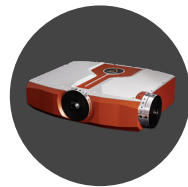
SHG/THG/FHG



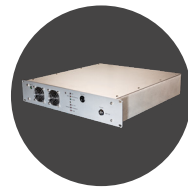
Mango OPA



Non Linear  
Compression



GLASS



Synchrolock