

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 μ 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) 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.

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
- > **FemtoTrig™**
- > No burst length limitation
- > FemtoBurst™
- > Optional green, UV and DUV outputs
- > Industrial design for 24/7 operation

Specifications

	Satsuma	Satsuma HP	Satsuma HP ²	Satsuma HP ³
Average Power	> 5 W	> 10 W	> 20 W	> 50 W
Energy Per Pulse	> 10 µJ*	> 20 µJ*	> 60 µJ	> 50 µJ
Pulse Width	< 350 fs to > 10 ps			
Repetition Rate	From single shot to 40 MHz			
Central Wavelength	1030 +/- 5 nm			
Beam Quality	M ² <1.2			
Beam Circularity	> 87 %			
Beam Pointing Stability	<25 µrad/°C			
Long Term Mean Power Stability	< 1 % rms over 100 hours			
Warm-up Time	< 30 min			

*High Energy Option

**Water-cooled version available on request

OPTIONS

Harmonic generation	Integrated, Mono-wavelength, up to 4-wavelength	
	Output wavelength - 515 nm, 343 nm, 257 nm	
Femtotrig™ - real pulse on demand	Pulse to pulse control with high precision	Jitter 25 ns
Femtoburst™ - arbitrary burst shaping	Defined pattern on request	
Burst Mode	No length limitation	up to 80 pulses at 500 kHz

Dimensions

Laser Head	52 x 33 x 12 cm
Power Supply	4U 19" rackable

Weight

All Models	23 kg
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Cooling

Satsuma, HP, HP ²	Air-cooled**
Satsuma HP ³	Water-cooled



Niji



Mango



Compress



Synchrolock

