

## Supercontinuum Laser Source

## ATG7100

### Features

- Instrument Power: >1W (Optional High Power: 10W-20W)
- Visible Light Power: >500mW (Optional >1000mW)
- Max. Spectral Range: 350nm-2400nm (Customizable Range)
- Repetition Rate: 0.01-200MHz
- Power Stability: <1%
- Adjustable Repetition Rate: 10kHz-200MHz
- Pulse Width: ~100ps (Optional 50ps)
- Pulse Energy: >1 $\mu$ J
- Trigger Mode: Supports External Trigger and Synchronous Output
- Single-Mode Output

### Application

- Photocurrent Microscopy for
- Nanophotonics
- Fluorescence Spectroscopy and Imaging : Fluorescence Spectrometer & HSI
- Super-Resolution Imaging (STED)
- Optical Coherence Tomography (OCT)
- Photoacoustic Microscopy
- Fiber Optic Sensing

### Description

The ATG7100 is the latest supercontinuum light source launched by Optosky. It features a maximum spectral range of 350nm-2400nm and a total power output of up to 10-20W (optional). The ATG7100 can achieve a repetition rate of up to 200MHz with continuous adjustability, supporting external trigger and synchronous output functions. The external trigger can support up to 80MHz. With power stability of less than 1% and a pulse width as narrow as 50ps (optional), it meets various application needs by controlling the repetition rate.

Depending on the application requirements, the ATG7100 can adjust the repetition rate to cater to different needs. When operating at a low repetition rate of 1MHz, it can provide >1 $\mu$ J pulse energy, making it ideal for applications demanding high pulse energy such as super-resolution imaging (STED) and nonlinear detection. When operating at high repetition rates of 20MHz-200MHz, it is particularly suitable for optical coherence tomography (OCT), nanophotonics, and fluorescence lifetime spectroscopy.



## 1. Parameter

Model	ATG7100	ATG7100-PRO8	ATG7100-PRO20
Spectral Range	350nm-2400nm (Selectable Range)		
Total Power (Full Spectrum)	>1W	>8W	
Power Stability	<1%		
Pulse Width	~100ps (Customizable 50ps)		
Repetition Rate	5MHz (Other Fixed Rates Optional))	0.1-80MHz (Adjustable)	0.1-200MHz (Adjustable)
External Trigger	100kHz-2MHz or 1MHz-80MHz (External Trigger Voltage Amplitude 0~5V)		
Beam Quality	$M^2 < 1.1$		
Polarization	No Polarization		
PC Interface	USB, Wireless Bluetooth	USB	
Synchronous Output (SMA)	NIM Signal Output Voltage Amplitude 0--1V TTL Signal Output Voltage Amplitude 0-3.3V	NIM Signal Output Voltage Amplitude 0--1V	
Power Supply	100-240V 50/60Hz		
Dimensions	300×245×70mm <sup>3</sup>	442×301×176.5mm <sup>3</sup>	
Weight	<10kg	<20kg	

## 2 Relevant Test Data

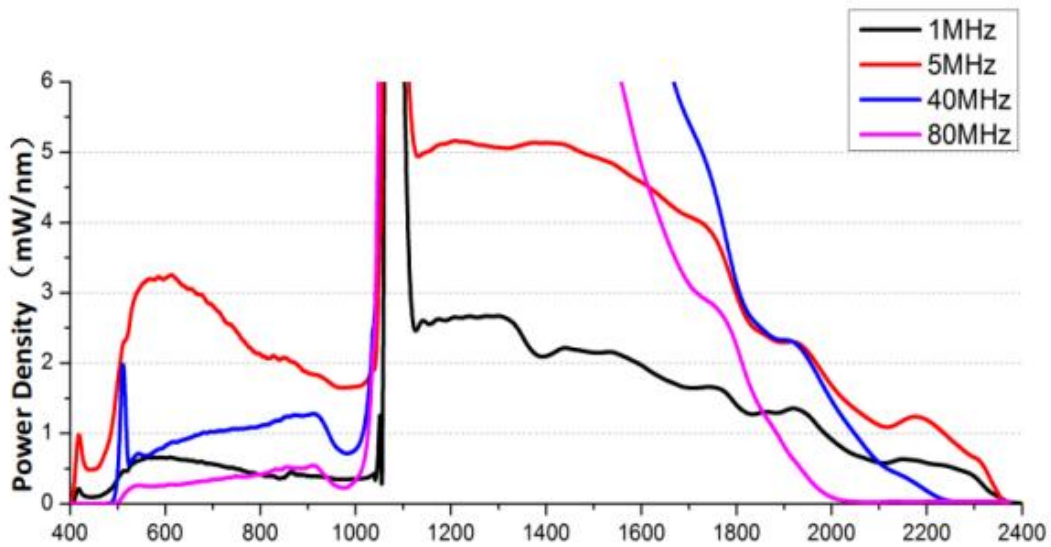


Figure 1: Typical Spectrum of ATG7100-PRO