

PEACHES SERIES

Compact Ultrafast Fiber Laser for Quantum Applications



Key Features:



Tunable and Adjustable Pulse Repetition Frequency up to 2 GHz, Burst Capability, Optional Arbitrary Pulses Sequences



Many Wavelengths Available : 460 - 515 - 530 -670- 775 - 780 -920 - 1030- 1064 – 1550 - 1560 nm, Slightly Tunable, MHz Linewidth



Ultrashort Pulse Duration from 500 fs to 35 ps



Multistage Fiber Amplifier up to 30 W



Compact, Turn-key Master/Slave System

Advantages for Quantum Technologies

PEACHES product range integrates an innovative electronical pulse generation system which delivers from femtosecond to ten's picosecond pulses.

The repetition rate is continuously adjustable on a high range, up to the GHz regime. Lasers from the **PEACHES series** can work with arbitrary pulses sequences in external synchronization mode for "photon gun" applications.

For a even more flexible system, the wavelength can be optionally tunable for standard wavelengths used in Quantum applications around 920 or 1550 nm for example.

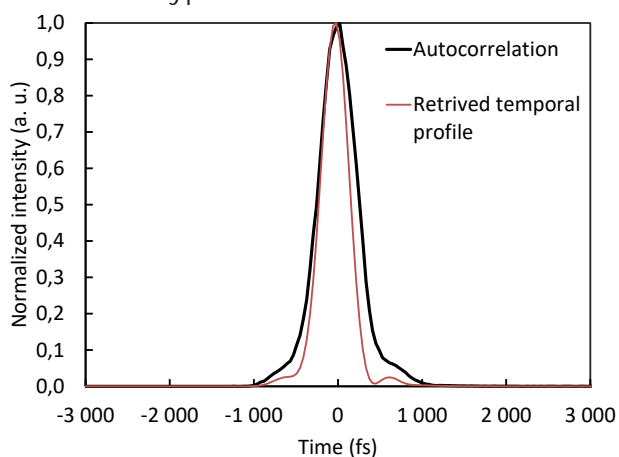
PEACHES systems fit perfectly any industrial and scientific application that requires master/slave synchronization and small footprint.

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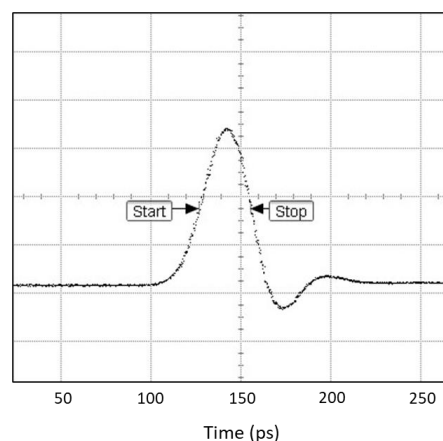
Specifications

Central Wavelength	(1)	920 nm	1030 nm	1064 nm	1550 nm	1560 nm
Avg. Output Power	(2)	Up to 30 W				
Max Pulse Energy	(3)	> 1 μ J				
Power Stability	(4)	< 5 % RMS				
Spectral Bandwidth		< 1 nm, FWHM				
Pulse Duration		Fixed, from 500 fs to 35 ps, FWHM				
Timing Jitter	(5)	< 3 ps RMS				
Repetition Rate		Up to 2 GHz, Burst Capable				
Polarization		Linear, > 20 dB				
Synchronization		Master/Slave				
Beam Quality		Fibered Output up to 1 W or Free-space Output - $M^2 < 1,3$				
Cooling System		Air Cooled				
Options						
Wavelength Tunability		910 – 940 nm	1020 – 1080 nm	1530 – 1570 nm		
SHG Module (Fixed Wavelength), Avg Power up to 10 W	(2)	Between 455 and 470 nm	Between 510 and 540 nm	Between 765 and 785 nm		
Arbitrary Pulses Sequences (Ext. Triggering Mode Only)		Available				
(1) Other wavelengths available upon request		(4) Depends on test duration and stability of ambient temperature				
(2) Average power is depending on pulse repetition rate		(5) Depends on clock or sync signal				
(3) Depends on pulse repetition frequency						

Typical 500 fs Pulse Profile



Typical 27 ps Pulse Profile



All information in this document is subject to change without prior notice. – Updated 01/2023



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IRISIOME SOLUTIONS

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