PowerSpectrum™

TPSR– TUNABLE PULSE STRETCHER FOR ULTRAFAST FIBER LASERS

The PowerSpectrum™-TPSR allows for precise control over pulses duration of femtosecond fiber lasers.

Used as a pulse stretcher, TeraXion's TPSR greatly simplifies the bulk optics alignment of the chirped amplification stage of a femtosecond laser. It allows for dynamic tuning of the pulse duration and the laser output peak power.

The TPSR product enables fast R&D prototyping and once in a final configuration provides a cost-effective solution in manufacturing.

Features

- Broad wavelength range
- Higher dispersion orders tuning β2, β3
- Active tuning β2, β3
- Customizable parameters
- Low loss
- Up to 800ps stretching

Benefits

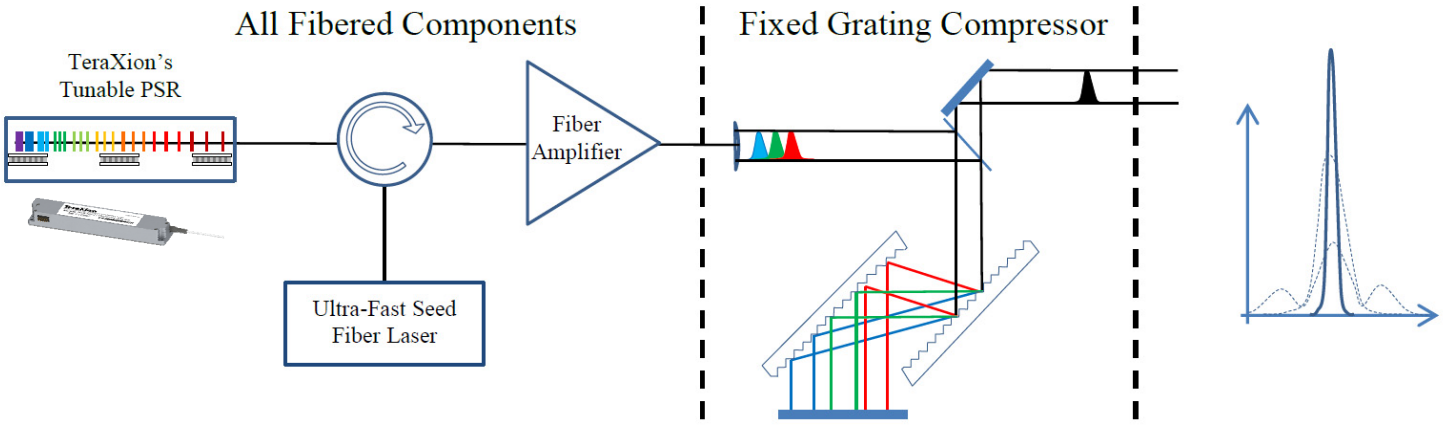
- Active control of pulse duration
- Build an alignment free femtosecond fiber laser
- Fast R&D prototyping development

Specifications

Wavelength Range (Complete coverage)	800-2400nm
Bandwidth (1)	0.2 to 100nm
Total stretching	800ps
Dispersion rate	10 to 1000ps/nm
High order dispersion tuning	β2, β3
Reflectivity	Up to 99%
Fibers supported	SM, PM and LMA
Packaging	Thermal tunable platform

(1) Other bandwidth available on demand

Typical CPA (Chirped-Pulse Amplifier) fiber laser block diagram



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Ordering information

For orders, questions, specific requirements or to learn more about TeraXion's products, contact us at

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