

TeraXion

PowerSpectrum™

CM-V Chirped module with VBG compressor



The PowerSpectrum™ CM-V is the most compact and robust ultrafast pulse stretcher+compressor pair on the market. Every stretcher+compressor unit is paired in-house and features a TeraXion TPSR-V that has been individually designed and tuned to a specific volume Bragg grating (VBG) compressor. This attention to detail results in a superior phase control and performance that are unmatched in the industry.

TeraXion developed the CM-V to ensure the highest possible performance for ultrafast lasers using VBG pulse compression.

Our exclusive FBG dispersion management expertise facilitates accurate phase control, which enables pedestal-free fs pulses.

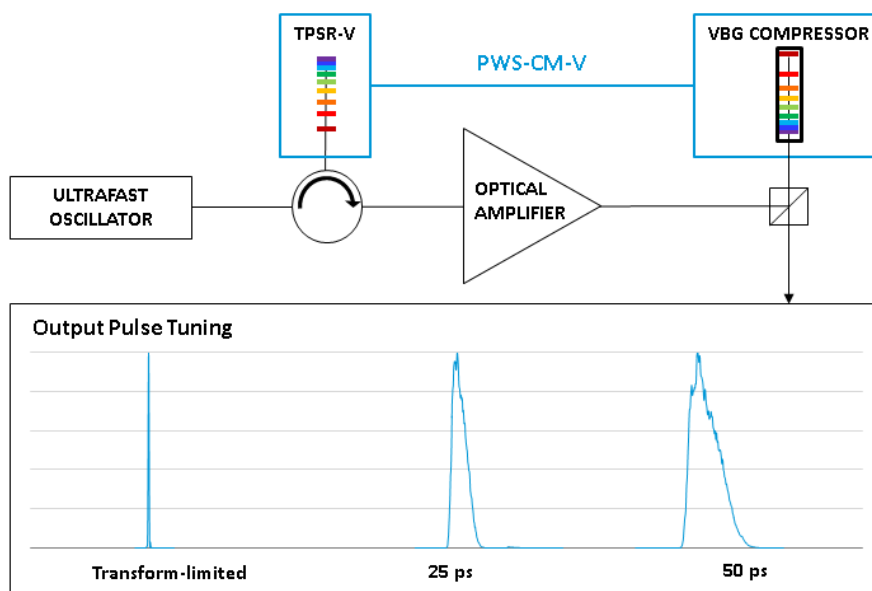
In-house pairing of each TPSR-V to a specific volume Bragg grating (VBG) compressor minimizes phase errors for optimal pulse compressibility.

Our flexible and user-friendly software make it easy to integrate the CM-V into any laser design.

Top 5 Features

- **Time-saving:** TeraXion has the facilities, skills and resources to pair TPSR-V and VBG units far more efficiently than most end-users.
- **Robust:** The compact, all-fiber construction remains operational in changing environmental conditions.
- **Compact:** The PowerSpectrum™ CM-V is the most compact pulse stretcher+compressor pair in the industry.
- **Cost-effective:** The composite design of the CM-V, combined with full electronic control, results in shorter cycle times, increased throughput, and lower operating costs.
- **Integrated:** Software integration between the CM-V and the laser system enables dynamic and precise pulse control and virtually eliminates hardware alignment and servicing.

Chirped-Pulse Amplification with a VBG Compressor



General Specifications

Parameters		Units
Center wavelength band ⁽¹⁾	1	μm
Minimum input pulse duration	≥150	fs
FBG spectral shape ⁽²⁾	Customizable	
Total stretching window	≤500	ps
VBG compressor matching	GD function and phase error matching	
Pulse tuning	From transform-limited up to 50	ps
Dispersion tuning	D ₂ , D ₃ and D ₄	
Fiber type	PM	
Module dimensions	14 x 22 x 130	mm
Control	USB/I ² C	
VBG Diffraction efficiency	85	%
VBG Dimensions	5 x 5 x 50	mm
RoHS compliant	Yes	

(1) Other wavelengths available upon request
 (2) Amplifier gain bandwidth enhancement available upon request

Ordering information

For orders, questions, specific requirements or to learn more about TeraXion's products, contact us at info@teraxion.com

TeraXion

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