

PowerSpectrum™

CM-V — Chirped Module with VBG Compressor for Ultrafast Laser
 85 ps/nm Configuration : CM- 1030V-700[9F-6-(85)]-M1-0P2-0T1

Overview

The PowerSpectrum™ - Chirped Module for Ultrafast Laser combines TeraXion's Tunable Pulse Stretcher and a VBG compressor. Matched in house, the pair offers 85 ps/nm of stretching factor and the possibility to achieve a compressed pulse duration of < 700 fs. It is the ideal solution for a robust, compact and cost-effective chirped-pulse amplified (CPA) femtosecond laser, no matter the gain medium.

System Parameters

Center Wavelength	Slow Axis	1030	nm
Minimum recompressed pulse duration ¹	<	700	fs
Beam Quality M2	<	1.35	
Stretching Factor		85	ps/nm
Total Stretching Window ²		500	ps

1 : Depends on pulse bandwidth

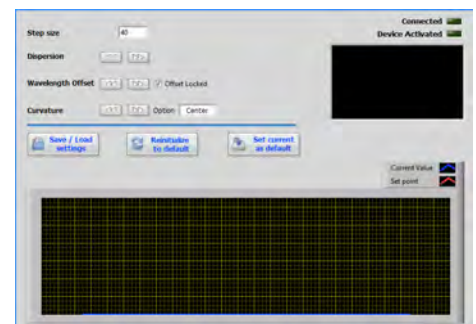
2 : Limited by VBG length

PWS—Tunable Pulse Stretcher Optical Parameters

Reflectivity	>	70	%
Spectral Bandwidth (FWHM)		9	nm
Tolerance on Spectral Bandwidth	+/-	1	nm
Full D ₂ Tuning Range		5.1	ps/nm
Full D ₃ Tuning Range		0.4	ps/nm ²
Fiber Type		PMCMS	
Pigtail length	>	1	m
Connector Type		None	
Module Dimensions (without cable)		14 x 22 x 130	nm
Supply Voltage		5	V
Power Consumption		3	W
Control Protocol		I ² C	



The PowerSpectrum™—TPSR



i²C Software Platform

MKT-FSTD-PWS-CM-V02 2017-11-1.0

China: Eachwave scientific instrument Co., Ltd
 Tel: +86-21-62209657, +86-21-54843093
 Email: sales@eachwave.com
 Web: www.eachwave.com

TeraXion

TERAXION.COM

PowerSpectrum™

CM-V — Chirped Module with VBG Compressor for Ultrafast Laser
85 ps/nm Configuration : CM- 1030V-700[9F-6-(85)]-M1-0P2-0T1

OptiGrate—Volume Bragg Grating Parameters

Spectral Bandwidth		6	nm
Tolerance on Spectral Bandwidth	+/-	0.6	nm
Diffraction Efficiency	>	85	%
Grating Thickness		50	mm
Tolerance on Grating Thickness	+/-	5	mm
Grating Aperture (clear aperture > 85%)		5 x 5	mm
Assembly Dimensions		55 x 6 x 10	mm
AR Coating Type		High Energy Broadband	

Power and Communication Module (Optional)

Supply Voltage	5	V
Power Consumption	3	W
Control Interface	USB to I ² C	
Cable Type (included)	DB15 to Hirose	
Module Dimensions (without cable)	55 x 80 x 150	mm



Power and Communication Module

3-Port Optical Circulator (Optional)

Center Wavelength		1030	nm
Insertion Loss (Maximum)	<	3.6	dB/port
Isolation	>	20	dB
Fiber Type		PM980	
Optical Power Handling		50	mW

Ordering information

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

China: Eachwave scientific instrument Co., Ltd
Tel: +86-21-62209657, +86-21-54843093
Email: sales@eachwave.com
Web: www.eachwave.com

© 2017 by TeraXion Inc. All rights reserved.

TeraXion Inc. reserves all of its rights to make additions, modifications, improvements, withdrawals and/or changes to its product lines and/or product characteristics at any time and without prior notice. Although every effort is made to ensure the accuracy of the information provided on this spec sheet, TeraXion Inc. does not guarantee its exactness and cannot be held liable for inaccuracies or omissions.

TeraXion

TERAXION.COM