

Vortex**Model: Vortex VM**

11/01/13

Type		Plasma Carrier Modulator		
Application		Connects to Ultra Auxiliary connector through a cord Powered by the Ultra		
Configuration		Fully balanced differential, Floating		
Energy type		AC Radio Frequencies (RF) Conduction Electromagnetic (EM) Electric Field (E-Field) Ultra-red (UR), Visible, & Ultra-violet (UV) Light		
Frequency	Modes of Operation	Single or Mixed Frequencies @ Fixed Carrier (115kHz Nominal) Square Drive Frequencies, Linear Drive Carrier		
	Waveform Types	Squarewave Sinewave Square Sweep Trapezoid Triangle	Hoyland Linear Ramp Up Linear Ramp Down Exponential Ramp Up Exponential Ramp Down	Equal Odd Order Harmonics Equal Even Order Harmonics Custom 1 Custom 2 Custom 3
	Range	1 to 100,000 Hz (only effective if below Carrier Frequency)		
	Resolution	1.00000 to 9.99999 Hz (0.00001 Hz) 10.0000 to 99.9999 Hz (0.0001 Hz) 100.000 to 999.999 Hz (0.001 Hz) 1,000.00 to 9,999.99 Hz (0.01 Hz) 10,000.0 to 100,000.00 Hz (0.1Hz)		
	Maximum Simultaneous Frequencies	1 Individual + Carrier 2 Equal Intensity Harmonic Multipliers + Carrier Multiple with Pulse and Frequency Harmonics + Carrier Multiple with Custom Arbitrary Waveforms + Carrier		
Duty Cycle, Modulation & Gate	Modes of Operation	Variable Duty Cycle 100% Single or Multiple Frequencies Square or Linear Drive Frequencies		
	Waveform Types	Squarewave Sinewave Square Sweep Trapezoid Triangle	Hoyland Linear Ramp Up Linear Ramp Down Exponential Ramp Up Exponential Ramp Down	Equal Odd Order Harmonics Equal Even Order Harmonics Custom 1 Custom 2 Custom 3
	Range	1 to 10,000 Hz		
	Resolution	1.0000 to 9.9999 Hz (0.0001 Hz) 10.000 to 99.999 Hz (0.001 Hz) 100.00 to 999.99 Hz (0.01 Hz) 1,000.0 to 9,999.9 Hz (0.1 Hz) and 10,000 Hz		
	Maximum Simultaneous Modulation Frequencies	1 Individual 2 Equal Intensity Harmonic Multipliers Multiple with Pulse and Frequency Harmonics Multiple with Custom Arbitrary Waveforms		
Intensity		1 to 100%		
Power Output		48 Watts Max. (dependent upon program & load impedance)		