PCT Megasonic Generators

Megasonic Solutions for:

- Semiconductor
- MEMs
- Disk Drives
- Media Storage
- Flat Panel & Flex Displays
- Optics
- LED
- Solar
- Medical Devices
- R&D Labs

PCT Systems 2182 Paragon Drive San Jose, CA 95131 Phone 510-657-4412 Email info@pctsystems.com Web www.pctsystems.com



Megasonic HyperClean[™] Generators

For over 20 years, PCT Systems, Inc. has pioneered and developed the leading megasonic technology available in the global market. With numerous patents and patents pending, customers around the world have come to depend on PCT Systems, Inc. for the highest quality and performance megasonic systems today. With the development of super fine geometries with more fragile structures and substrates, customers need more process development options than ever before to be successful, productive and profitable. HyperClean[™] incorporates PCT's unique energy-transfer technology in a heated all-quartz unit for superior submicron cleaning, reduced operating costs and high reliability.

Model 9400 Universal Generator



Model 6000 Series Generator



Power **ANY** Brand Transducer Plate with a PCT Megasonic Generator and see Improved Performance

Megasonic performance starts with the generator and not all generators are created equal. Simply put, PCT offers the most versatile and fully featured megasonic generators on the market.

Unmatched Process Control & Flexibility

No matter what the application, PCT HYPERCLEAN[™] Megasonic Generators have become the standard by which others are measured. No other manufacturer's generators are able to drive virtually any make megasonic transducer array. So whether a new system or replacement generator is needed, PCT can provide Process improvement with our patented HYPERCLEAN[™] technology.

PCT Systems, Inc. offers complete HYPERCLEAN[™] Megasonic Systems including a wide tank selection of quartz, plastic and stainless steel for any size application or substrate. Customizable transducer arrays in either direct bond or indirect transfer configurations offer an unequalled selection for users to optimize their systems.

PCT's Series 9400 Universal Generator

- Active Phase Shifting for 3 Dimensional Control of Megasonic Energy
- Individually Configurable and Tunable for Optimum
 Process Results
- Independent Power and Frequency Control
- Programmable Up to 8 Step Changes per Channel
- Programmable RF Output Range up to 500 Watts
 per Channel
- 4 Independent Channels with 2 outputs per Channel
- Synchronized or Individual Control of Each Channel
- Multiple Frequency Bands Individually Controlled
- Patented Multiplexing for On/Off Control of Individual Transducers
- Process Variables and Real Time Data Monitoring
- Universal Application for Most Competitive Transducers — No Matching Required
- Over 90%+ Efficiency from the Smallest Size Generator of all Competitive Units
- Smallest Footprint and Space Requirement Reduced Need for Multiple Generators
- And more . . .

PCT Megasonic Generators

Dimension	Model 6000 Series Generator	Model 9400 Universal Generator	Model 9200 Mini-Meg Generator
Width	14.0"	12.5″	12.5″
Length	14.0"	14.0"	14.0"
Height	7.0″	3.5″	3.5″
Megasonic Amplifier Operatio	n		
Controller	Multiplexing operation for 2-8 transducers per output. Optional embedded temperature controller for heaters	Independent Power & Frequency Control for each RF Output	
Number of Channels	2	4	2
Number of Outputs per Channel	8	2	2
Maximum RF Output/Channel	350 watts	500 watts	500 watts
Maximum RF Output per Unit	-	2000 watts	1000 watts
Programmable RF Output Range	0 to 350 watts per Channel	0 to 500 watts per Channel	0 to 500 watts per Channel
Programmable Recipes	7	7	7
Frequency Changes / Recipe	-	8	8
RF Output Power Tolerance	+/- 10%	+/- 10%	+/- 10%
Frequency Bands	600Khz-1MHz	500Khz-1MHz 1.0-1.5 MHz 2.0-2.5 MHz	Choice of 1 450kHz, 750kHz, 950kH
Mechanical Specifications			
Materials & Mounting Electrical Specifications	Anodized Aluminum with He	orizontal or vertical Mount	ing Options
Voltage Rating	208-240 VAC, 50/60 Hz		
Current Rating	Max 10 amps non-heated (Max 30 amps heated with Model 6000)		
-	0° to 27°C Operating Range, -25° to 50°C Storage Temperature Range		
Environmental Operating Range	0° to 27°C Operating Range,	-25° to 50°C Storage Temp	erature Range
Environmental Operating Range Frequency Resolution	0° to 27°C Operating Range, 100 Hz	-25° to 50°C Storage Temp	erature Range
		-25° to 50°C Storage Temp	erature Range
Frequency Resolution	100 Hz	-25° to 50°C Storage Temp	erature Range
Frequency Resolution Frequency Accuracy Programmable Sweep Functionality	100 Hz +/- 100 Hz	-25° to 50°C Storage Temp	erature Range
Frequency Resolution Frequency Accuracy Programmable Sweep Functionality RF Output Connectors	100 Hz +/- 100 Hz 1-10 KHz	-25° to 50°C Storage Temp	erature Range
Frequency Resolution Frequency Accuracy Programmable Sweep Functionality RF Output Connectors External Interface	100 Hz +/- 100 Hz 1-10 KHz		erature Range
Frequency Resolution Frequency Accuracy Programmable Sweep	100 Hz +/- 100 Hz 1-10 KHz DB15F RS232 or standard 3 pin cor	nector	
Frequency Resolution Frequency Accuracy Programmable Sweep Functionality RF Output Connectors External Interface Communication Ports	100 Hz +/- 100 Hz 1-10 KHz DB15F RS232 or standard 3 pin cor DB15 Female connectors for Storage	nector r each channel with interna	
Frequency Resolution Frequency Accuracy Programmable Sweep Functionality RF Output Connectors External Interface Communication Ports Transducer Connections	100 Hz +/- 100 Hz 1-10 KHz DB15F RS232 or standard 3 pin corr DB15 Female connectors for	nector r each channel with interna h keypad nterface through RS323 co	l safety loopback



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