



RF Energy

RFHIC PRODUCT CATALOGUE

RFHIC

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A blue circular graphic containing the text 'RF Energy Market Value' and a stylized arrow pointing downwards, composed of a grid of small blue dots.

**RF
Energy**
Market Value

TRANSITION IS NOW

RFHIC is the first and only GaN RF & Microwave device to subsystem solution provider in the world. With RFHIC's One-Stop GaN Solution process, we are capable of providing customers with customizable, time-efficient, and high-quality products like never before. See how our groundbreaking technology is leading the technological transition from tubes to GaN solid-state for next-generation applications in Industrial, Scientific, and Medical industries.

A dark blue circular graphic with a white dotted border, containing the text '\$1.3B USD' and smaller text below.

**\$1.3B
USD**

by 2024 with 96% CAGR

Source: Yole and Company Estimates

GaN Power Transistors

RFHIC's leading-edge GaN on SiC transistors are solving the power challenges of today's most demanding industries. It's unbeatable compact size, high-efficiency, power and wide frequency ranges are only available at RFHIC.

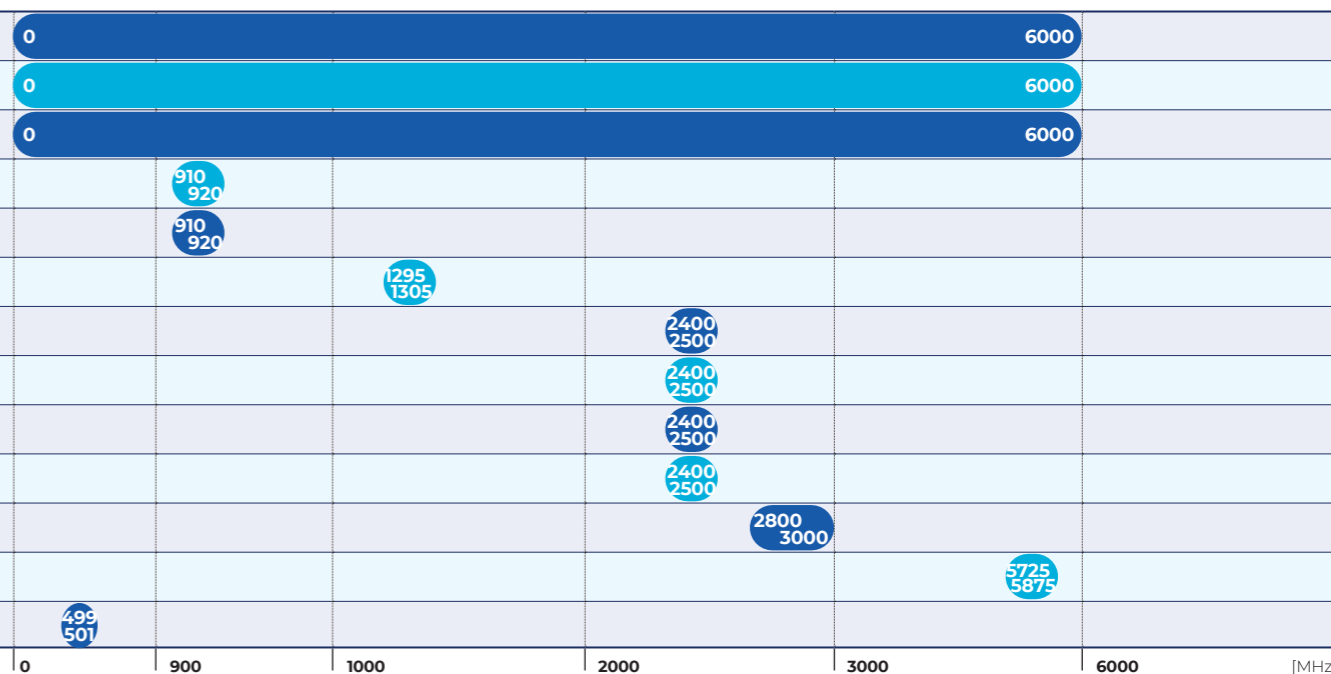


* All product datasheets can be downloaded here: [GaN Power Transistors](#)

Part Number	Type	Freq. [MHz]		Voltage	Output Power	Power Gain	Eff.@ Ppeak	Package
		Min	Max	[Vds]	[W]	[dB]	[%]	
ET43055P	S	DC	6000	50	70	13.4	71	NS-CS01
ET43028P	S	DC	6000	50	34	15.2	67	NS-CS01
ET43014P	S	DC	6000	50	18	15.5	64	NS-CS01
IE09300PC	S	910	920	50	330	17.5	80	NS-AS01
IE09150PC	S	910	920	50	160	17.6	82.5	NS-AS01
IE13550D	D	1295	1305	50	570	15	79	RF24001DKR3
IE24300P	S	2400	2500	50	310	11.4	70	NS-AS01
IE24200P	S	2400	2500	50	230	13.1	74	NS-AS01
IE24150P	S	2400	2500	50	170	12.5	72	NS-AS01
IE24100P	S	2400	2500	50	110	14.6	71	NS-AS01
IE29350D	D	2800	3000	50	350	11	70	RF24001DKR3
IE6305040V	S	5725	5875	40	66	14.2	59.5	NS-AS01
IE05600DC	D	499	501	50	580	19.1	75	RF24001DKR3

Frequency

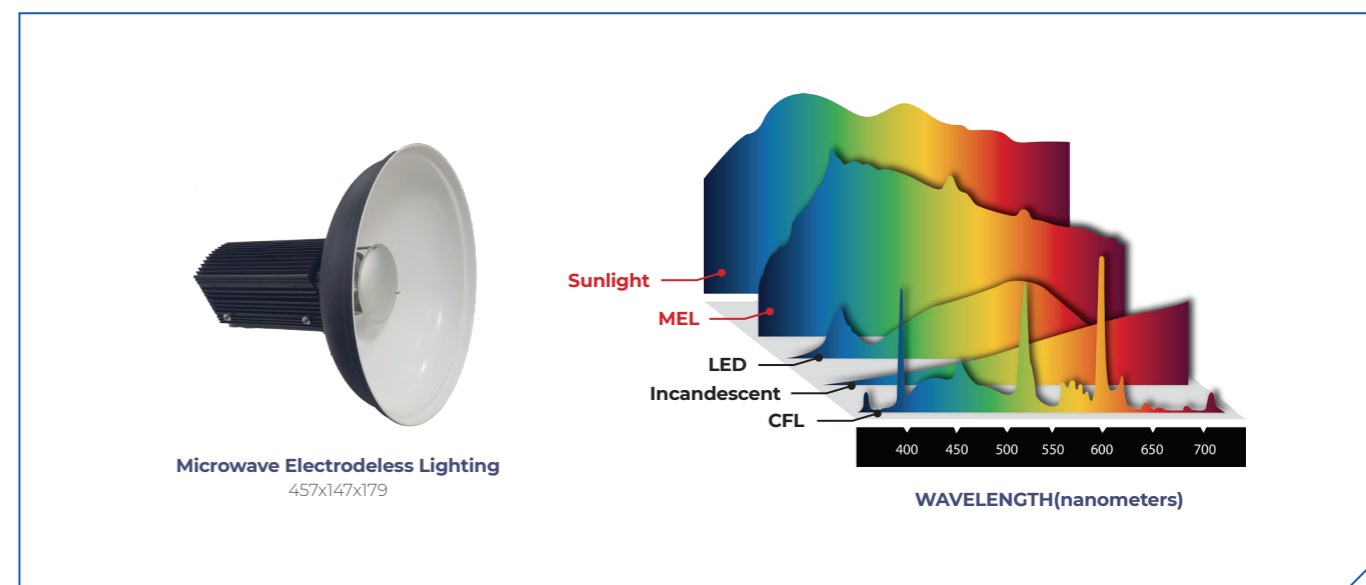
Single Package Dual Package



Microwave Electrodeless Lighting

RFHIC's microwave electrodeless light (MELs) commonly referred to as plasma lighting is designed for wide coverage lighting, agricultural grow lighting, and street light applications. By utilizing our exceptional GaN solid-state technology, it provides users with excellent color rendering index and longer lifetime. The enhanced color rendering and powerful visual acuity produced by MELs gives them a competitive edge to outdoor environments using natural sunlight

Part Number	Freq. [MHz]		AC Power	CRI	Cooling	Application	Voltage	Dimension
	Min	Max	[W]	[%]			[V]	[mm]
MEL-350	2400	2500	350	97	Air	Flood light Grow light Stadium light	110/220V AC	457x147x179



Microwave Electrodeless Lighting
457x147x179

GaN Solid-State Power Amplifiers

RFHIC's power amplifiers utilize our world-class GaN HEMT transistors to provide users with high power, efficiency, and wide bandwidth for industrial, scientific, and medical applications. Our wide product portfolio covers a broad range of frequencies and power levels for both pulsed and CW operations. Customized solutions are available upon customer request.



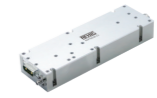
2kW-GaN SSPA
RIM092K0-20



2kw-GaN SSPA
RIM132K0-20



1.6kW-GaN SSPA
RIM251K6-20



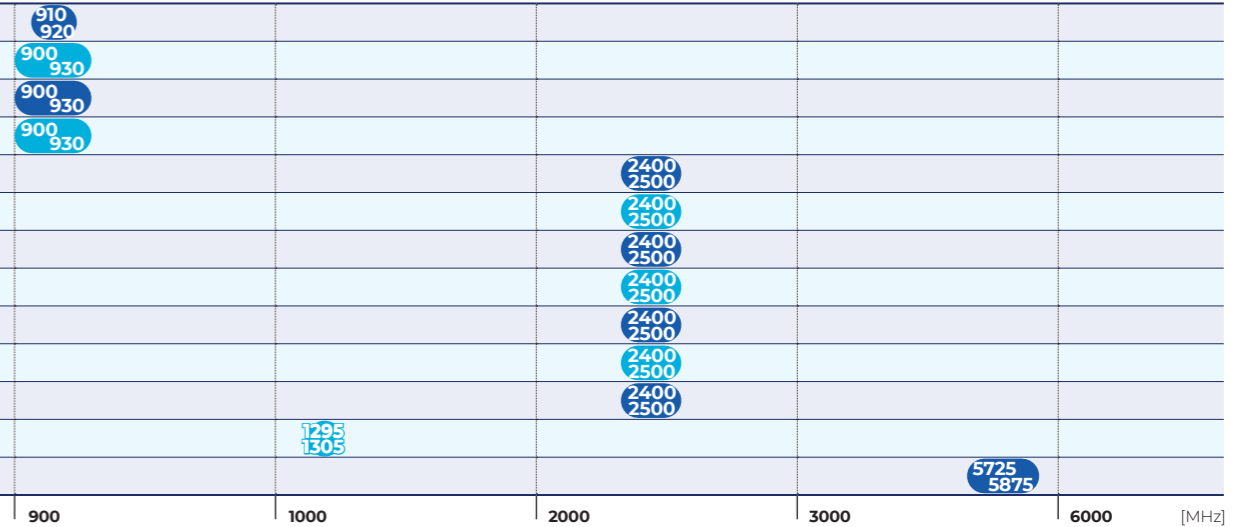
200W-GaN SSPA
RNP58200-C2

* All product datasheets can be downloaded here: [GaN SSPA](#)

Part Number	Freq. [MHz]		Voltage	Output Power	Power Gain	Efficiency	Dimension
	Min	Max	[Vds]	[W]	[dB]	[%]	

RNP09550-20	910	920	50	550	60	66	240x98x26
RIM092K0-20	900	930	50	2000	58	63	400x232.2x48
RIM091K5-20	900	930	50	1500	50	63	400x219x45
RIM091K1-20	900	930	50	1100	50	63	280x170x51
RIM251K6-20	2400	2500	50	1600	60	53	332x188x44
RNP24800-20	2400	2500	50	800	44.6	53	285x98x35.2
RNP24550-21	2400	2500	50	550	43	55	240x98x26
RCP25400-20L	2400	2500	50	420	13.3	63	106x43x12
RYP24200-20S	2400	2500	50	200	28	68	70x30x4
RIM25100-20E	2400	2500	50	100	50	60	215x120x30
RIM25200-20E	2400	2500	50	200	50	60	215x120x30
RIM132K0-20	1295	1305	50	2000	53	65	360x200x46
RNP58200-20	5725	5875	40	200	45	33	223x93x50

Frequency



GaN Solid-State Microwave Generators

RFHIC provides a broad range of microwave generator systems fabricated with our cutting edge gallium nitride (GaN) HEMT technology. RFHIC's microwave generator systems are designed to provide optimal stability and controllable microwave power demanded by industrial, scientific, and medical applications. RFHIC's complete microwave generator systems come with a power supply unit (PSU), GaN solid-state power amplifiers (SSPA), cable assembly, and waveguide converter. RFHIC offers custom turn key design and complete microwave generators for both low and high power applications operable in the standard ISM frequencies (915MHz, 2450MHz, and 5.8GHz).



30kW, 900-930 MHz
GaN Solid State
Microwave Generator
RIK0930K-40T



30kW L-band
GaN Solid State
Microwave Generator
RIK1330K-40T



20kW S-band
GaN Solid State
Microwave Generator
RIK2520K-40T



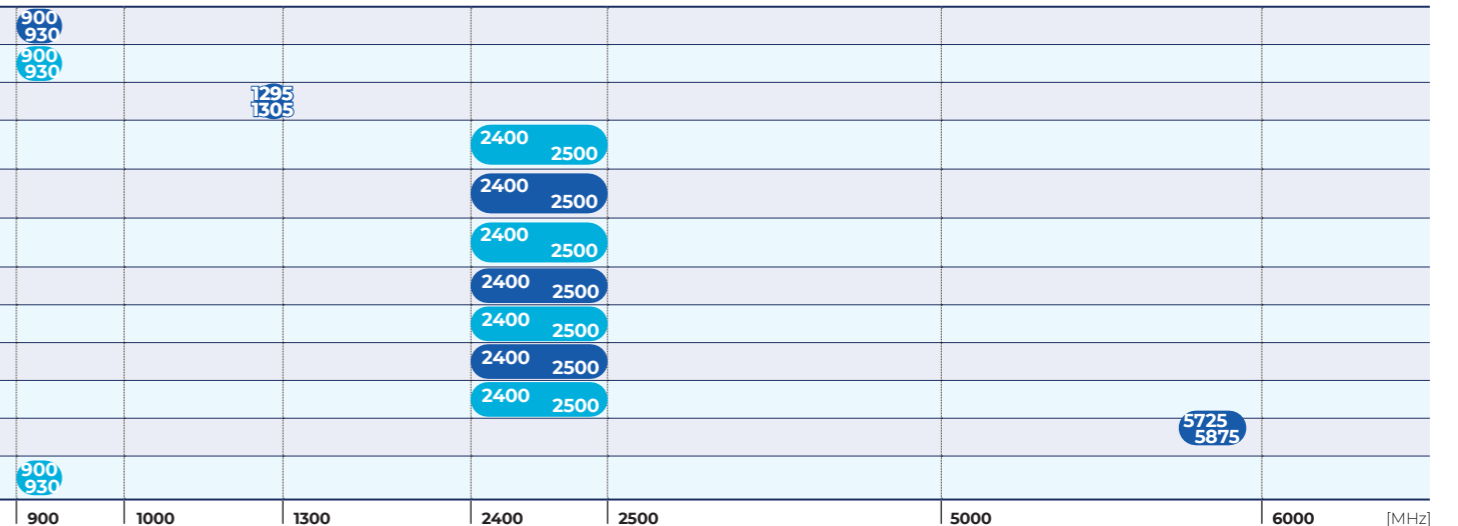
6kW, S-band
GaN Solid State
Microwave Generator
RIU256K0-40T

*All product datasheets can be downloaded here: [GaN SSMG](#)

Part Number	Freq. [MHz]		Pout	Eff.	Output	Cooling	Type	PSU	Dimension
	Min	Max	[W]	[%]					

RIK0915K-40T	900	930	15000	60	WR975 Waveguide	Water	19" Rack	Yes	600x1630x750
RIK0930K-40T	900	930	30000	56	WR975 Waveguide	Water	21" rack	Yes	1108x833x2153
RIK1330K-40T	1295	1305	30000	53	WR650 Waveguide	Water	21" rack	Yes	1108x833x2153
RIU256K0-40T	2400	2500	6000	54	WR284 Waveguide	Water	Stand-alone	Yes	507x392x192(Head) 482x443x133(PSU)"
RIF253K0-40T	2400	2500	3000	50	WR340 Waveguide	Water	19" Shelf	Yes	576x482x140(Head) 448x402x88(PSU)"
RIF252K0-40T	2400	2500	2000	50	WR340 Waveguide	Water	19" Shelf	Yes	576x482x140(Head) 448x402x88(PSU)"
RIK2520K-40T	2400	2500	20000	55	WR430 Waveguide	Water	19" Rack	Yes	600x900x1860
RIM25100-20G	2400	2500	100	60	N Type Connector	Air	Module	No	215x120x30
RIM25200-20G	2400	2500	200	60	N Type Connector	Air	Module	No	215x120x30
RIU251K4-20	2400	2500	1400	53	DIN Type Connector	Water	Module	No	359X241X42
RIF58800-20	5725	5875	800	32	WR159 Waveguide	Water	19" Shelf	Yes	483x178x610
RIU093K0-50T	900	930	3000	56	WR975 Waveguide	Water	Stand-alone	No	250x400x510

Frequency



***For any questions on all of our RF Energy products please click here.**

Designed by [ RFHIC CORPORATION 02 2264 8355]

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