



**Product Features**

- 900 ~ 930MHz
- High Output power : 15kW(CW) Peak Power
- Using GaN on SiC HEMT
- 50% System Efficiency
- High reliability & stability, long-run operation
- High frequency-stability with PLL technology
- Accurate adjustment function on output power, phase, frequency
- Very good frequency spectrum even at low power

**Applications**

- Building block for high-power systems
- Plasma generation
- Industrial Heating and Drying
- Microwave CVD
- Microwave sintering
- Microwave chemistry
- Materials processing
- Study of biological phenomena
- Semiconductor Equipment



**Description**

The RIK0915K-40T uses GaN on SiC HEMT technology which performs high breakdown voltage and high efficiency. This product is packaged in a rack mountable shelf with the water cooling system.

And this product is designed for high power ISM(Industrial, Scientific, Medical) applications with adjustable power up to 15kW.

This microwave generator is suitable for use in CW, pulse and linear applications. This high efficiency rugged device is targeted to replace industrial magnetrons and other vacuum tubes currently powering industrial heating, drying, microwave CVD and sintering.

**Electrical Specifications**

PARAMETER		UNIT	MIN	TYP	MAX
Operating Frequency		MHz	900	-	930
Operating Bandwidth		MHz	-	30	-
Waveguide Output		-	WR770 or WR975		
CW Variable Output Power		kW	1.5	-	15
Power Spectral Bandwidth		kHz	-	-	500
Pulse Periode		Sec	0.1	-	2
Pulse Duty Cycles		%	1	-	99
Frequency Resolution		kHz	-	100	-
Frequency Accuracy & Stability		ppm	-2.5	-	2.5
Operating Voltage		VAC	400 VAC 3 phase 50/60 Hz		
Power Consumption		kVA	-	30	-
Control	Generator On / Off	Enable / Disable			
	RF Mode	CW / Pulse			
	RF Control	Frequency, Pulse width and duty, Output Power etc.			
Monitoring	FWD & RVS Power	System Output and Reflect Power from 10 to 100%			
	Temperature	Individual Power Amplifier			
	Current	+50Vdc Output of Power Supply Unit			
	VSWR	System VSWR > 10 : 1			
Control Interface		RS232			

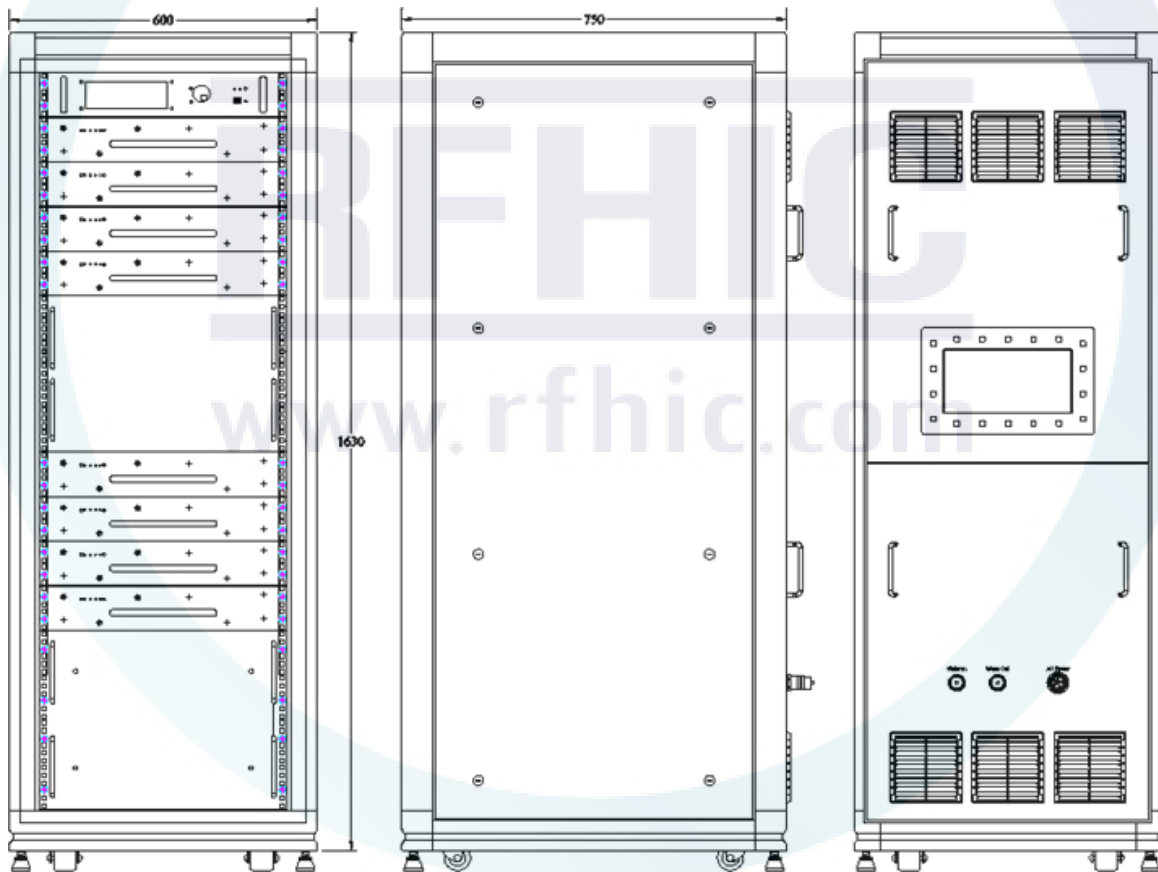
**Mechanical Specifications**

PARAMETER	UNIT	VALUE
Dimensions (L x W x H)	mm	600 x 1630 x 750
Weight(w/o external Isolator)	Kg	280(typ)
Cooling Type	-	PA & Combiner: Water, Power Supply Unit: Air
Water Cooling Condition	-	TBD

**Note**

Dimension and weight may be subject to change.

**Mechanical drawing**



**Revision History**

Part Number	Release Date	Version	Description	Data Sheet Status
RIK0915K-40T	July, 2018	0.1	Initial release of datasheet	Preliminary



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