



Product Features

- 1295 ~ 1305MHz
- High Output power : 30kW(CW) Peak Power
- Using GaN on SiC HEMT
- 53% 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
- Particle accelerator



Description

The RIK1330K-40TG 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 applications with adjustable power up to 30kW.

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 particle accelerators.

Electrical Specifications

PARAMETER		UNIT	MIN	TYP	MAX
Operating Frequency		MHz	1295	-	1305
Operating Bandwidth		MHz	-	10	-
Waveguide Output		-	WR650		
CW Variable Output Power		kW	3	-	30
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		
System Efficiency		%	-	53	-
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			
Maximum mismatch for full power output		TBD			
Control Interface		USB			

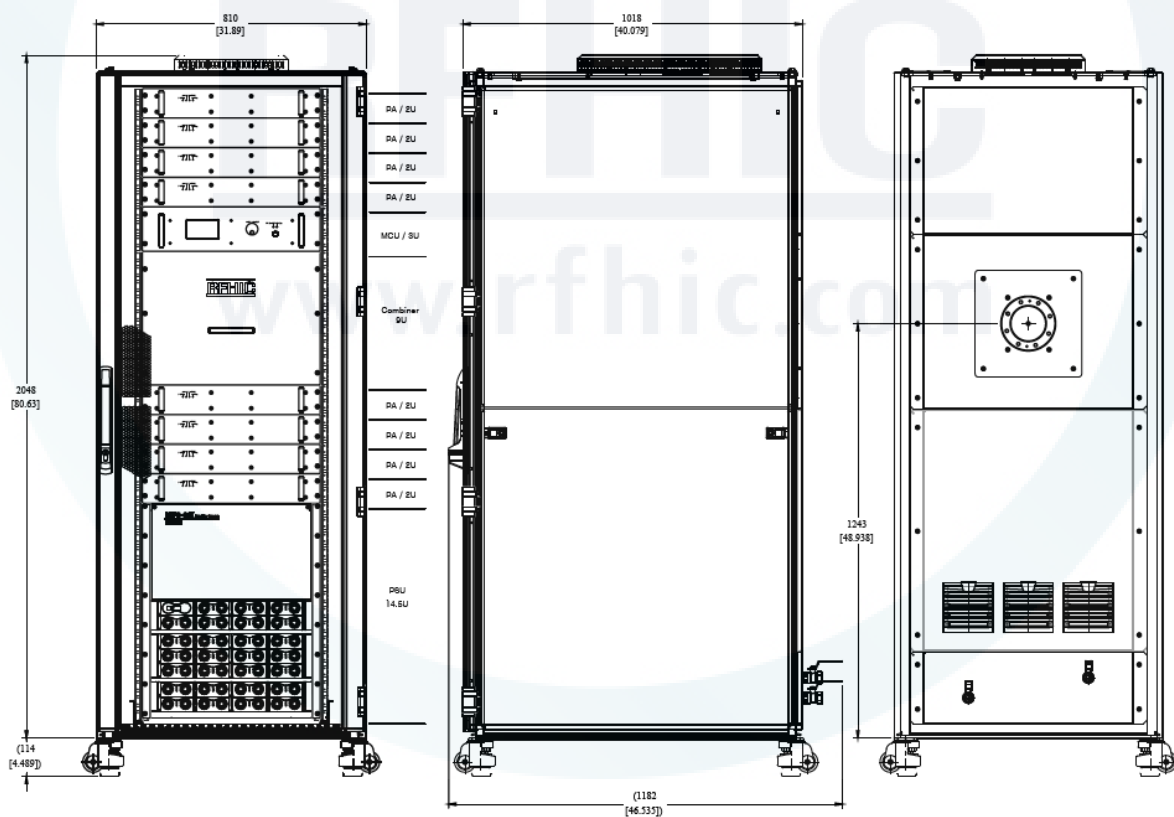
Mechanical Specifications

PARAMETER	UNIT	VALUE
Dimensions (L x W x H)	mm	1018 x 2048 x 810(w/o AC Terminal Box and External Combiner)
Weight(w/o external Isolator)	Kg	TBD(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
RIK1330K-40TG	JUN, 2019	0.1	Initial release of datasheet	Preliminary



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