100W Solid State EMC Benchtop Power Amplifier 2GHz~6GHz

Features

- Automatic Calibration
- Built in Temperature Compensation
- Adjustable Attenuation: 31.5dB Range,0.5dB Step Size
- Supply Voltage: 110V/220V AC

Typical Applications

- Microwave Radio and VSAT.
- Telecom Infrastructure.

Parameters	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	2		6				GHz
Gain	60	70					dB
Gain Flatness		±3.0	±5.0				dB
Gain Variation Over Temperature		±3.0	±5.0				dB
Input VSWR		1.5	2.0				: 1
Saturated Output Power (Psat)	49.5	50					dBm
IM3 2-Tone@ 37dBm/Tone, 1MHz Spacing	-25	-30					dBc
Isolation S12		-60	-50				dB
Supply Current (Idd) (AC=220V)	1.76						A

Weight	1250 ounces (Max.)	Impedance	50ohms
Input / Output Connectors	Input: N-Female Output: N-Female	Material	Aluminum
Finish	Gray Painted	Power Supply Connector	D-SUB COMBO 3POS

Absolute Maximum Ratings

Operating Voltage	AC110~220V
RF Input Power(RFIN)	Psat – Gain

Biasing Up Procedure

Step 1	Connect input and output with 50 Ohm source and load with in band return loss better than 10dB.
Step 2	Connect AC Plug
Step 3	Flip switch to “ON” position

Power OFF Procedure

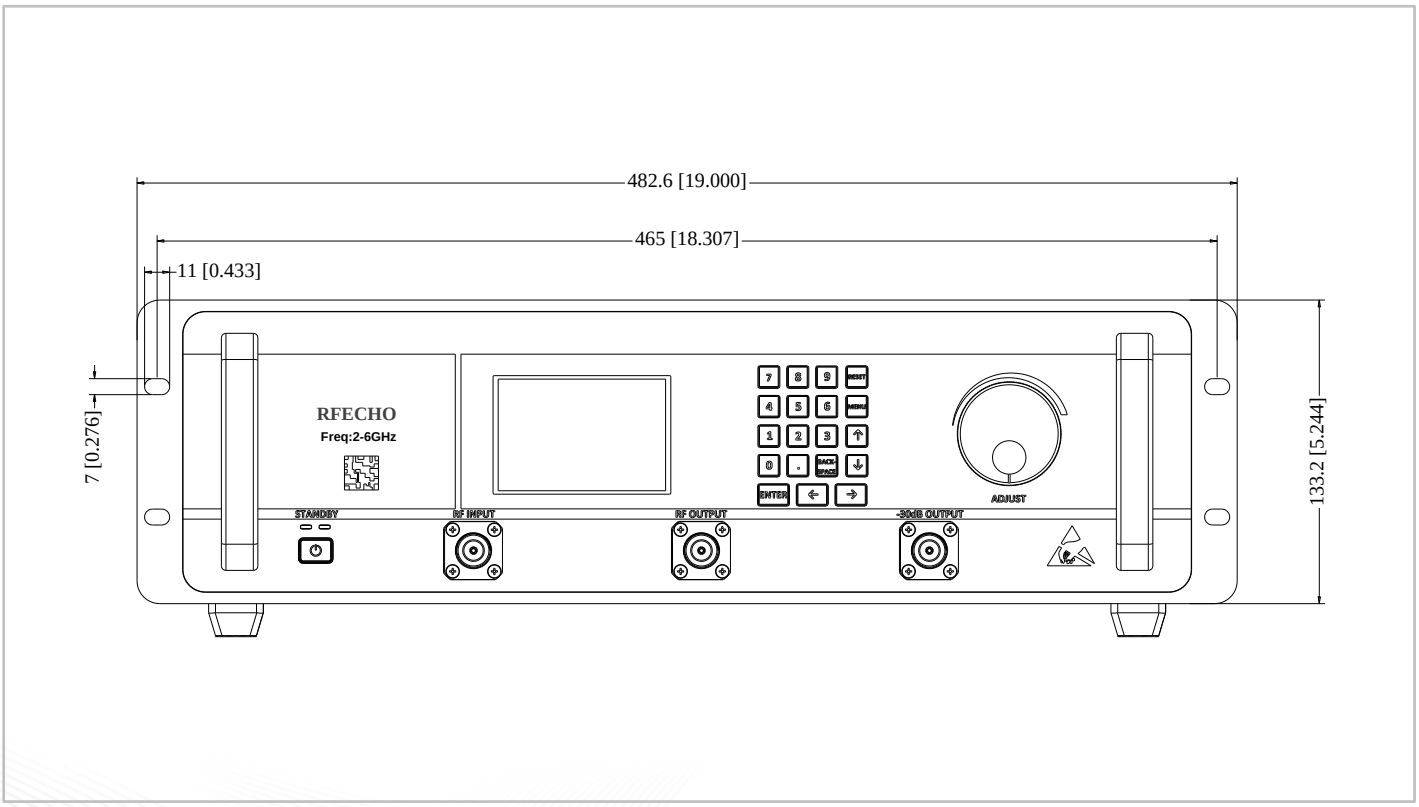
Step 1	Flip switch to “OFF” position
Step 2	Remove AC Plug
Step 3	Remove RF Connection

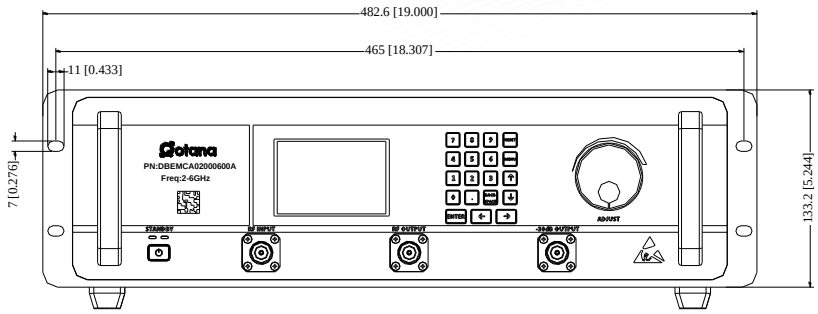
Environmental Specifications

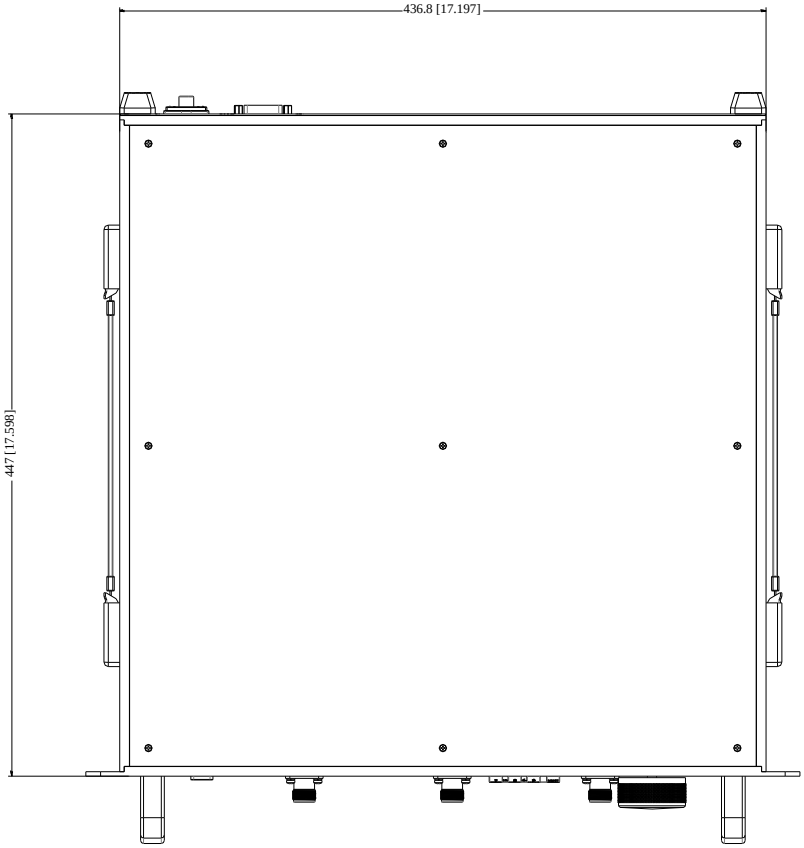
Operational Temperature	-40ºC~+85ºC (Case Temperature below 85)
Storage Temperature	-50ºC~+105ºC
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35ºc, 95%RH at 40ºc
Shock	20G for 11msec half sine wave,3 axis both directions

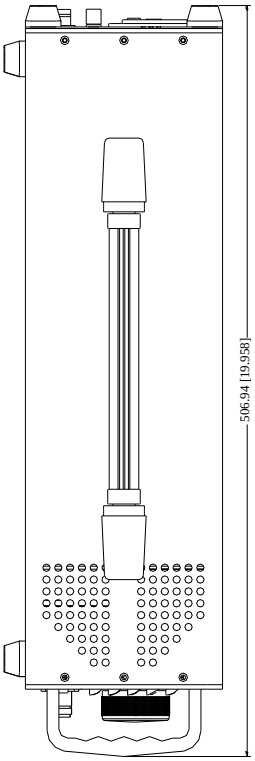
Outline Drawing:

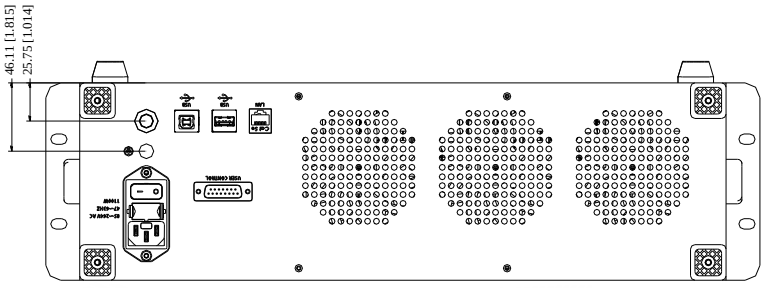
All Dimensions in mm (inches)



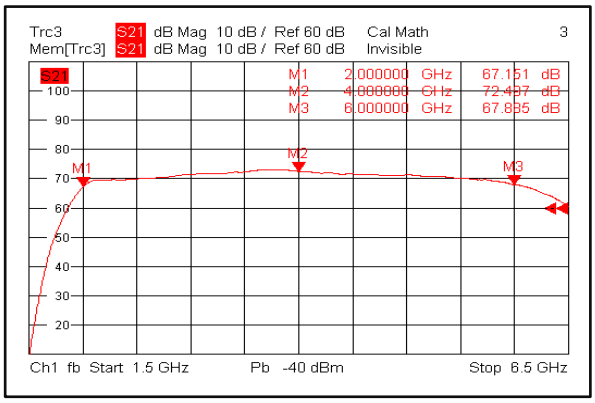




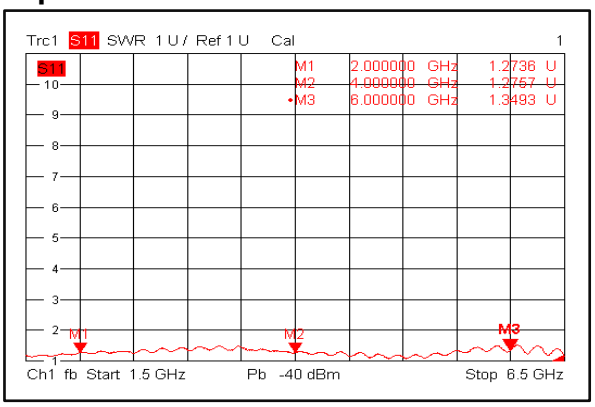




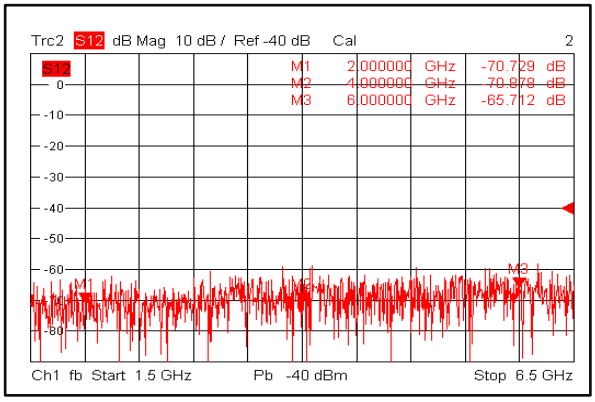
Gain @+25℃



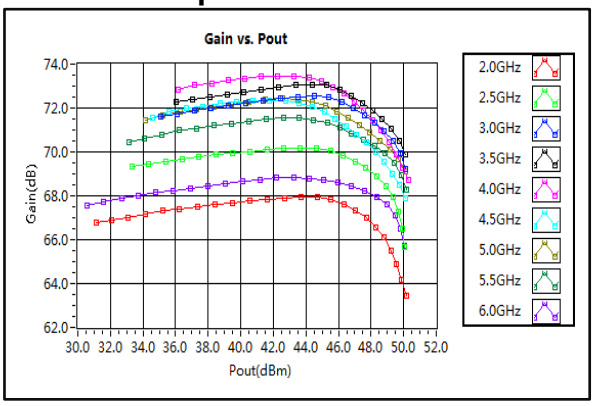
Input VSWR



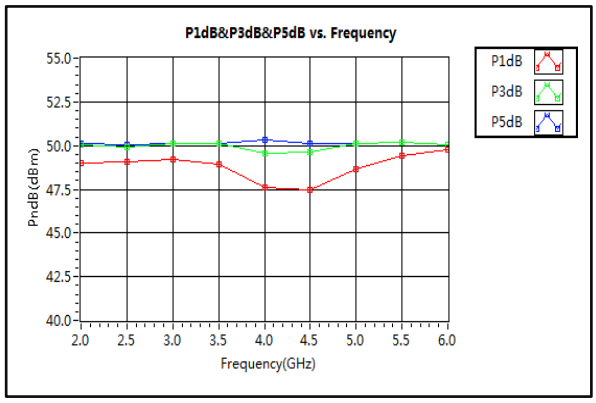
Isolation



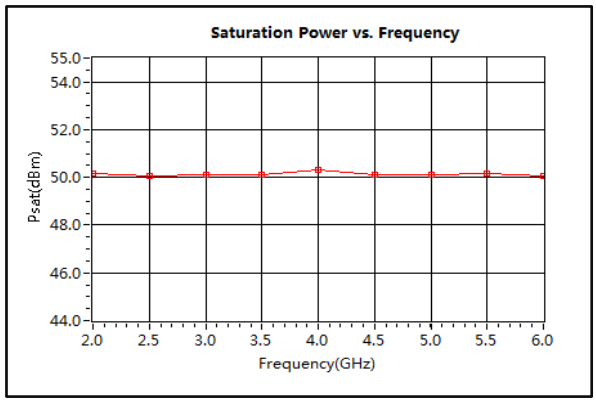
Gain vs. Output Power



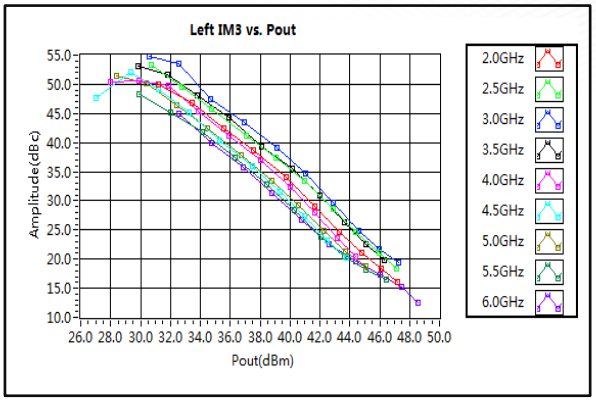
P1dB & P3dB & P5dB vs. Frequency



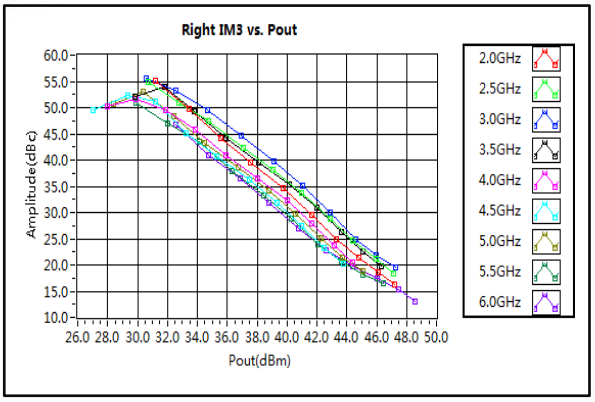
Saturation Power vs. Frequency



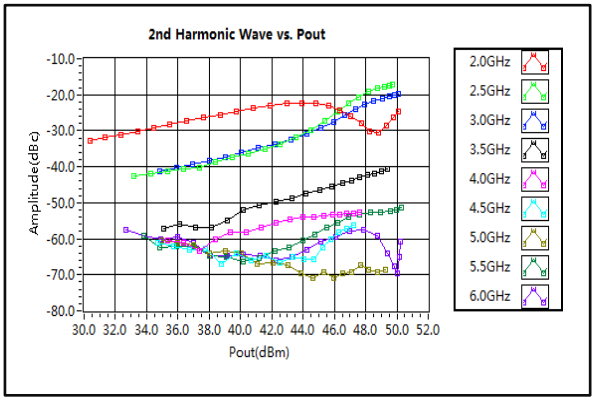
Left IM3 vs. Pout



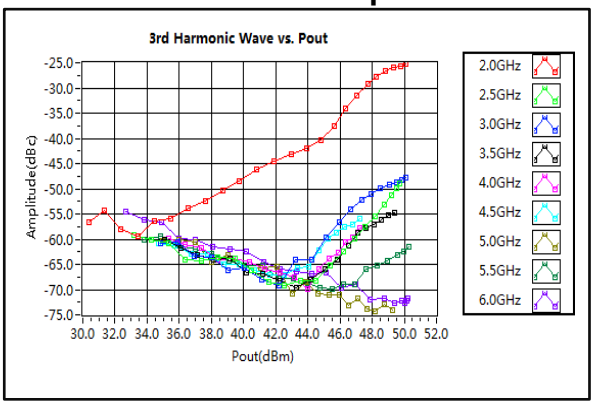
Right IM3 vs. Pout



2nd Harmonic Wave Output Power



3rd Harmonic Wave Output Power



4th Harmonic Wave Output Power