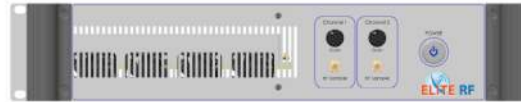


# MULTI CHANNEL TEST SYSTEM

**Model – AB1.85.0G3738AC-S**

## Dual High Power Amplifier



50 watts CW. 1800 to 5000 MHz 100- 240 VAC

16 Channel System

### General Description:

Elite RF's **AB-S Series** is a 16 Channel DUT system designed for CW/Pk signals; its class AB amplifiers are fabricated on GaN on SiC process and can operate up to **5.0 GHz**. These amplifiers offer high power density, octave bandwidth performance, low thermal resistance, and wideband performance. They can be widely used for military and commercial applications.

Like all Elite RF amplifiers, this product comes with an industry leading warranty.

### Features

Wide Freq. Range  
High Output Power  
High Gain  
16- independent channels  
Independent control of power  
16- high power 50- ohm load ports  
16- way splitter  
RF Sample Ports

### Indicator options

Power

### Protections

Thermal Overload  
Over Voltage

### ELECTRICAL SPECIFICATIONS (1 Channel)

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	1800		5000	MHz
Output Power CW / Pk.	Psat	40	50		Watt
Output Power Average with 8:1 Peak Mod.	Pavg	4	5		Watt
Small Signal Gain	Gp	36	38		dB
Gain Flatness	Delta Gp 1	+/- 3	+/- 2		dB
Input VSWR	S11		2:1		Ratio
IMD @ 1 watt/tone @ 1 MHz spacing	IP3		48		dBm
Harmonics	H		-20		dBc
Spurious Signals	Spur		-60		dBc
Operating Voltage	Vop	100	120	240	VAC
AC system power @ 5 watts avg. / 16 ch.	Pd		1.0		Kw
AC system power @ 50 watts CW / 16 ch.	Pd		3.5		Kw
Noise Figure	NF		5		dB
Large Signal Gain	Lsg	35	37		dB
Max Load VSWR @ 5 Watts avg.	ML		Open/Short		Ratio

### ENVIRONMENTAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Operating Case Temperature	Tc	0		+40	Deg. C
Storage Temperature	Tstg	-40		+85	Deg. C
Relative Humidity (non-condensing)	RH			95	%
Altitude	ALT			10,000	Feet
Vibration/Shock	VI /SH				Normal Truck Transport

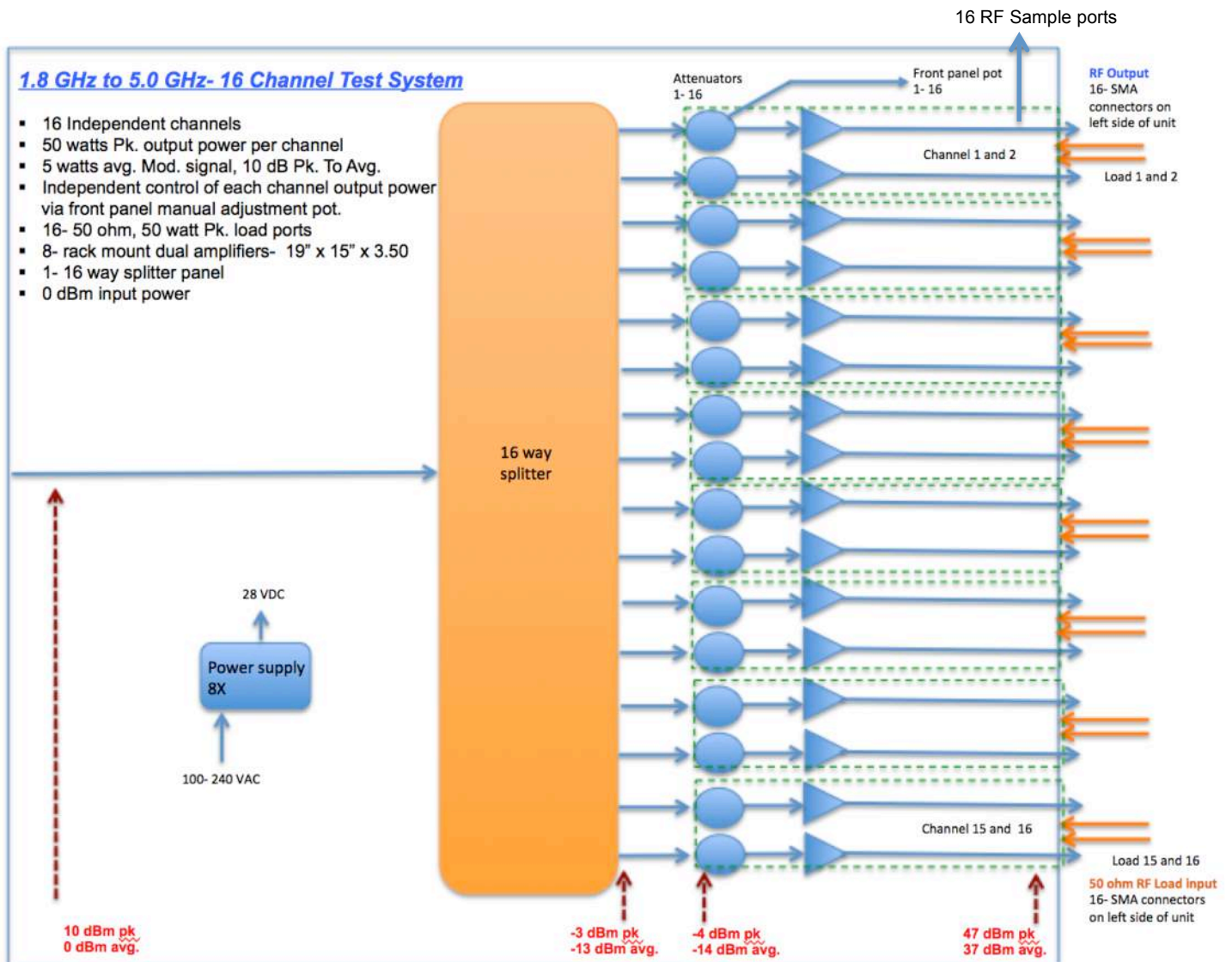
### MECHANICAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Dimensions	Dim		19 x 15 x 3.5		Inches
Weight	Wt.		25		lbs.
Connectors In/Out	RF Conn		SMA/SMA		-
Cooling	Th		Forced air cooling		-

### OPTIONS

Parameter	Add suffix to part number
Heat sink and fans	N/A
Isolator with forward and reverse voltage outputs	N/A
TTL Input Trigger	N/A

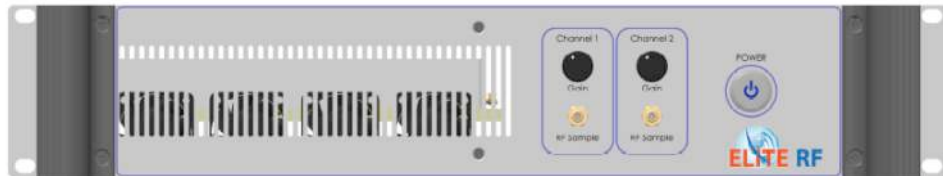
## System Block Diagram



Elite RF LLC

1700 Tower Dr, Hanover Park, IL 60133, USA  
 Call us for customer service/technical support at: 847-592-6350  
 Email: sales@eliterf.com Web: www.eliterfllc.com

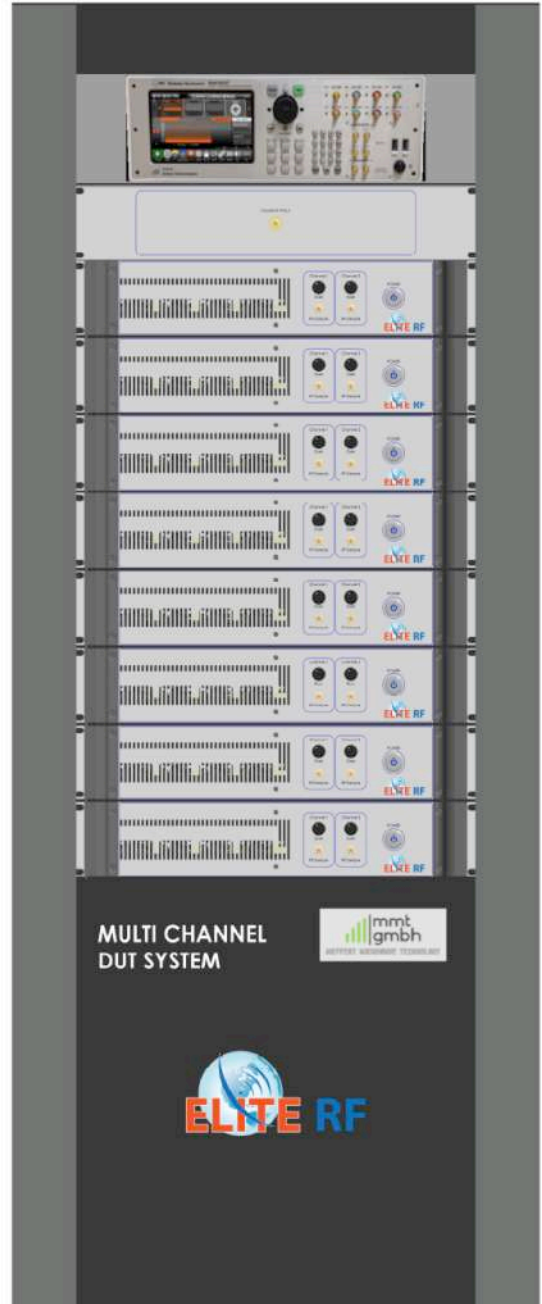
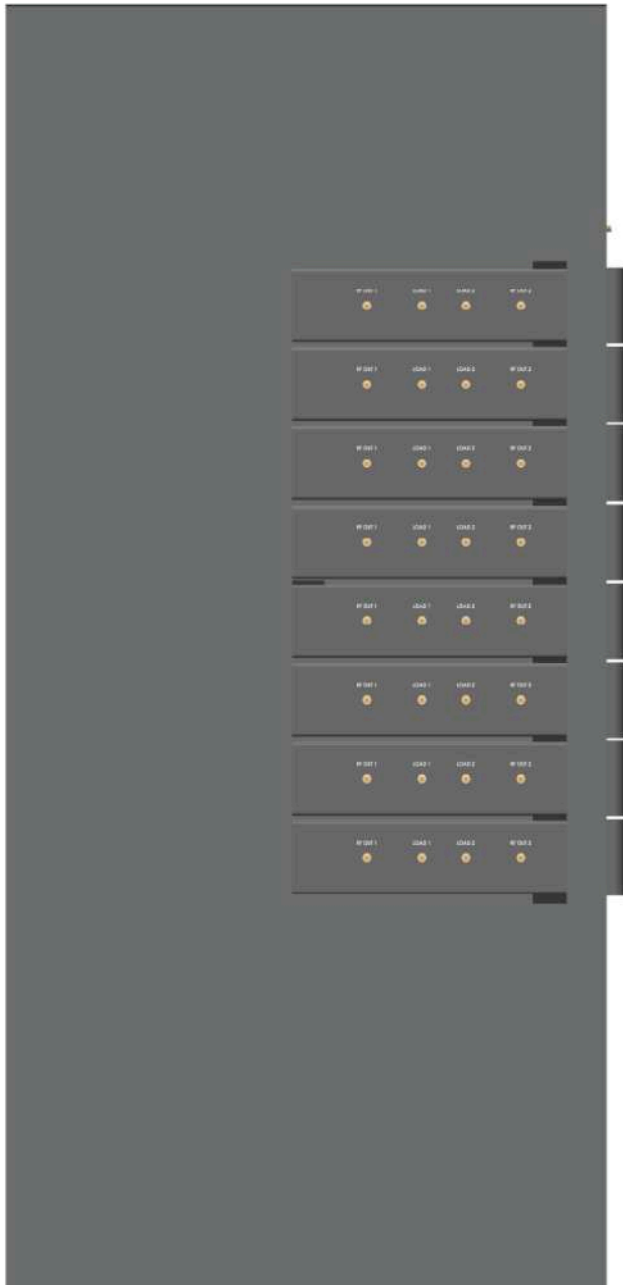
## Amplifier Front View



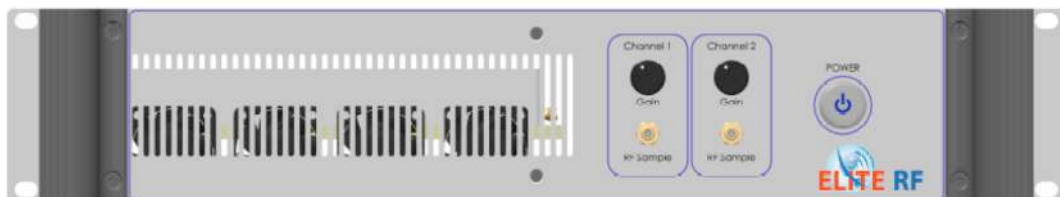
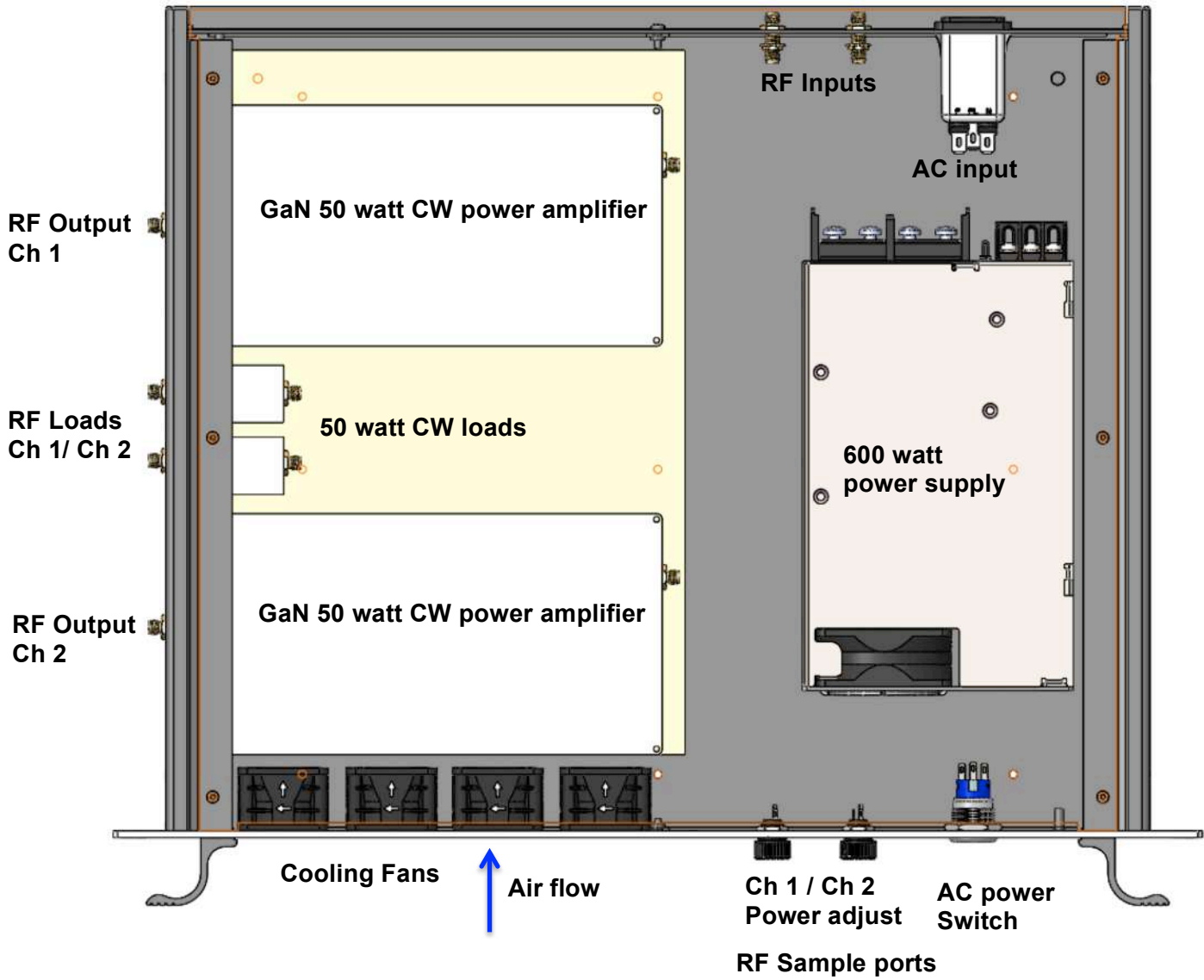
## Amplifier Left Side View



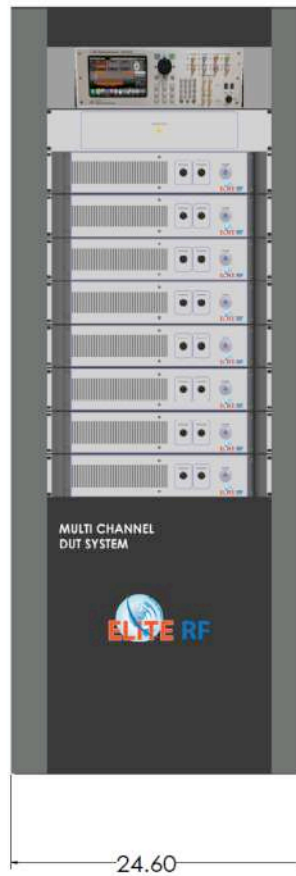
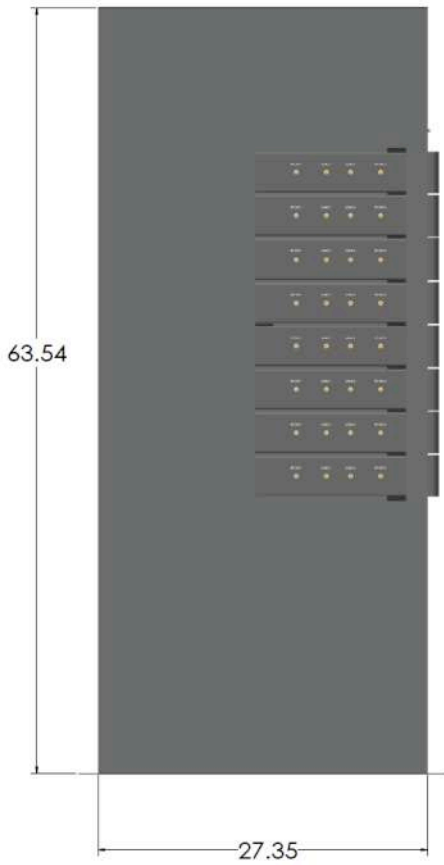
# System Front and Side View



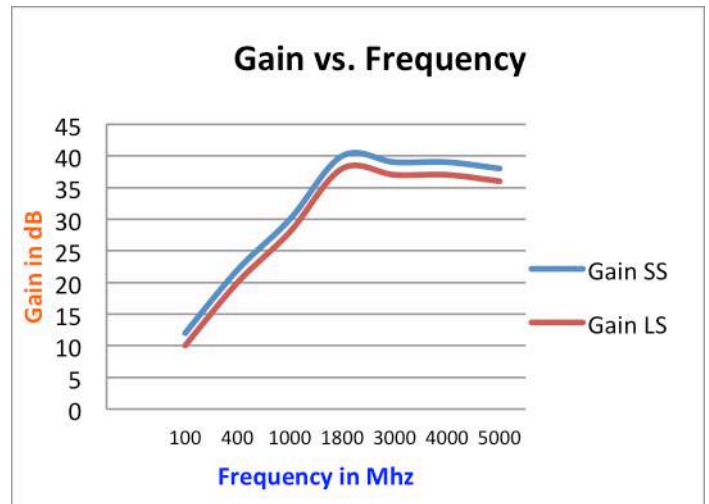
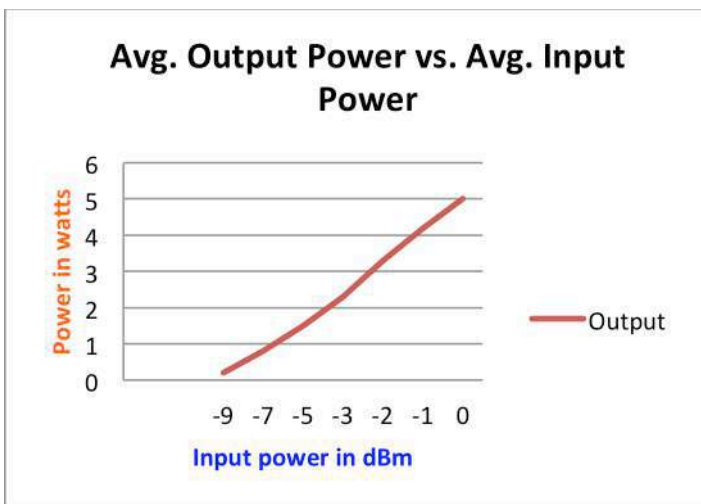
# Dual Amplifier Inside View



# Mechanical Drawings in inches



System Weight: 350 lbs



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 Specifications subject to change, consult sales for latest information