

MULTI CHANNEL TEST SYSTEM

Model – AB1.85.0G4342AC-S

Dual High Power Amplifier



20 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 **5-year warranty**.

Features

Wide Freq. Range
High Output Power
High Gain

Indicator options

Power

Protections

Thermal Overload
Over Voltage

16- independent channels on left and right side/ switchable
Independent control of power/ with ALC
16- high power 50- ohm load ports on left and right side
16- way splitter
RF Sample Ports on front panel

ELECTRICAL SPECIFICATIONS (1 Channel)

Parameter	Symbol	Min	Typ	Max	Unit
Frequency Range	BW	1800		5000	MHz
Output Power CW / Pk. @ end of 2 m cable	Psat	20	25		Watt
Output Power Average with 8:1 Peak Mod.	Pavg	2.5	3.0		Watt
Small Signal Gain	Gp	42	44		dB
Gain Flatness	Delta Gp 1	+/- 3	+/- 2		dB
Input VSWR	S11		2:1		Ratio
IMD @ 1 watt/tone @ 1 MHz spacing	IP3		45		dBm
Harmonics	H		-20		dBc
Spurious Signals	Spur		-60		dBc
Operating Voltage	Vop	100	120	240	VAC
AC system power @ 2.5 watts avg. / 16 ch.	Pd		1.0 KW		Kw
AC system power @ 20 watts CW / 16 ch.	Pd		3.0 KW		Kw
Noise Figure	NF		5		dB
Large Signal Gain	Lsg	40	42		dB
Max Load VSWR @ 3 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

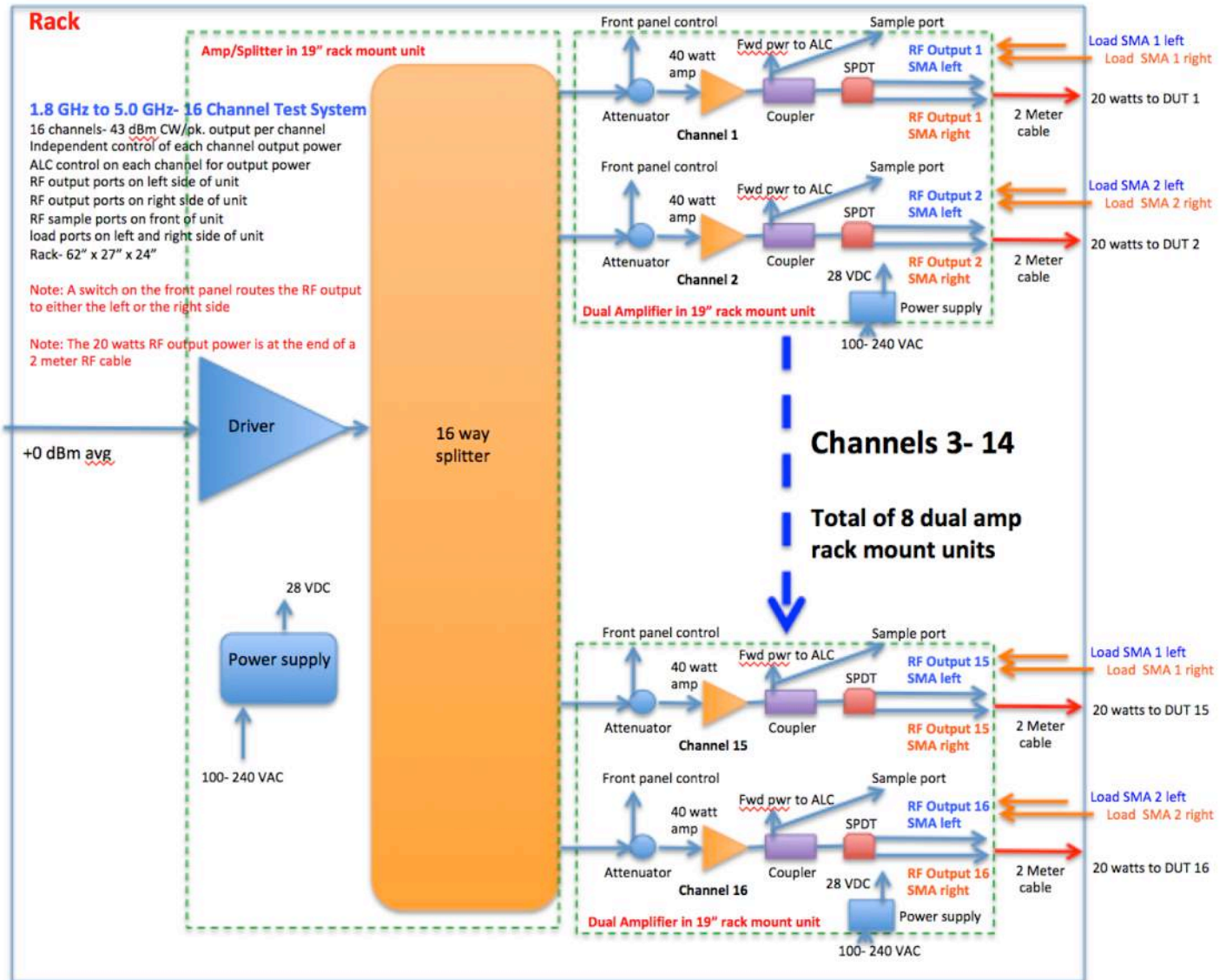
MECHANICAL CHARACTERISTICS

Parameter	Symbol	Min	Typ	Max	Unit
Dimensions	Dim		64 x 28 x 25		Inches
Weight	Wt.		330		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

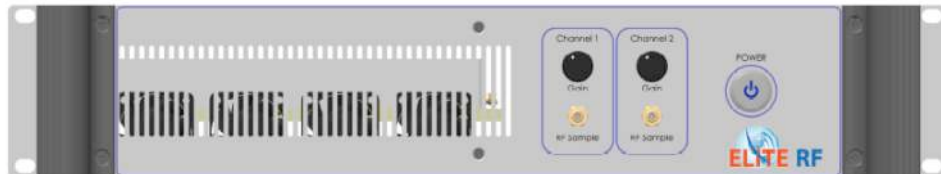
System Block Diagram



Elite RF LLC

2155 Stonington Ave, Suite 217, Hoffman Estates, IL. 60169
 Call us for customer service/technical support at: 847-592-6350 Order or
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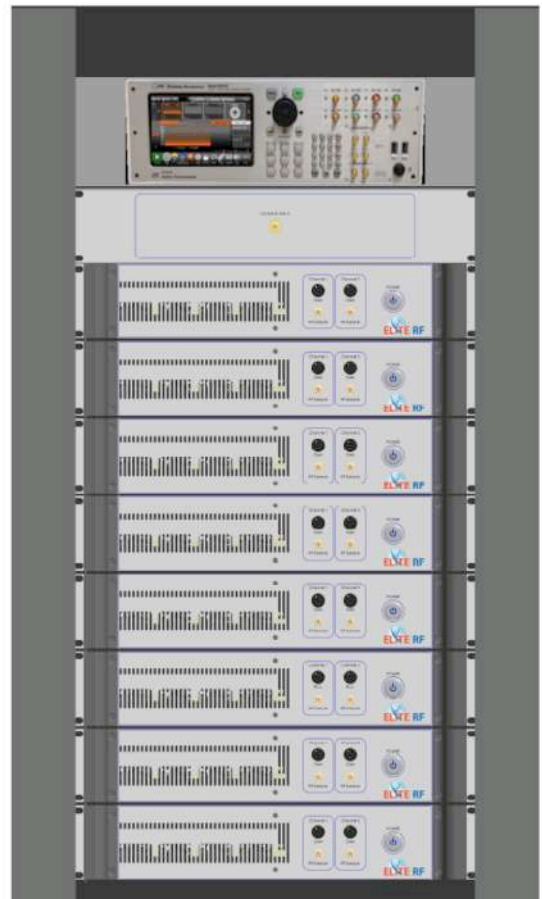
Amplifier Front View



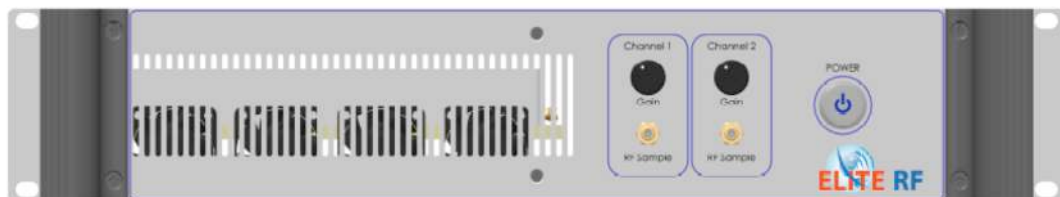
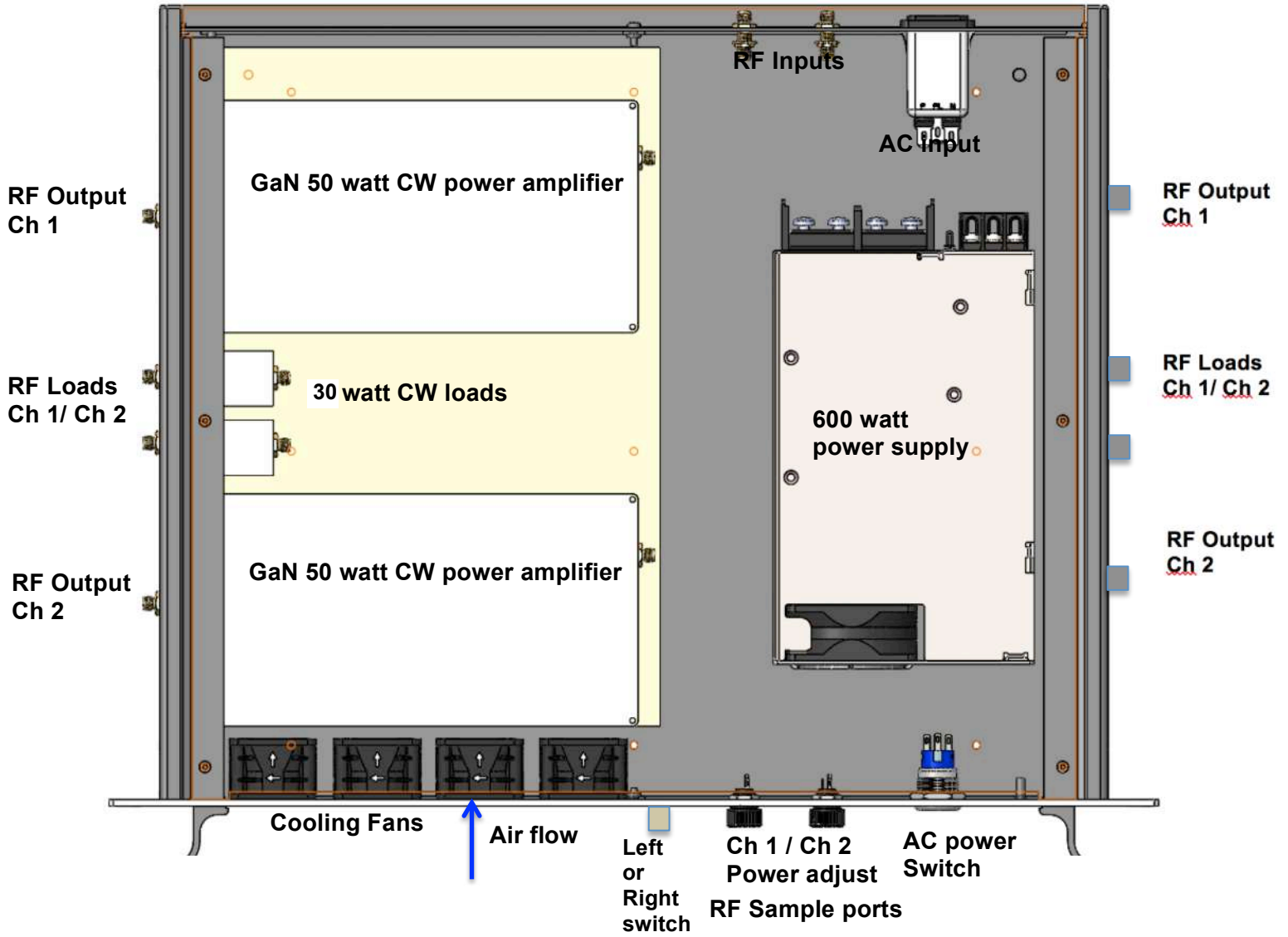
Amplifier Left Side View, Right side has the same 4 SMA connectors, a switch on the front panel controls the signals to the right or left



System Front and Side View

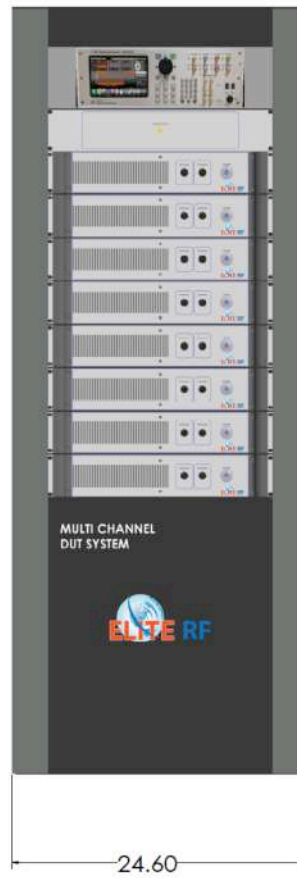
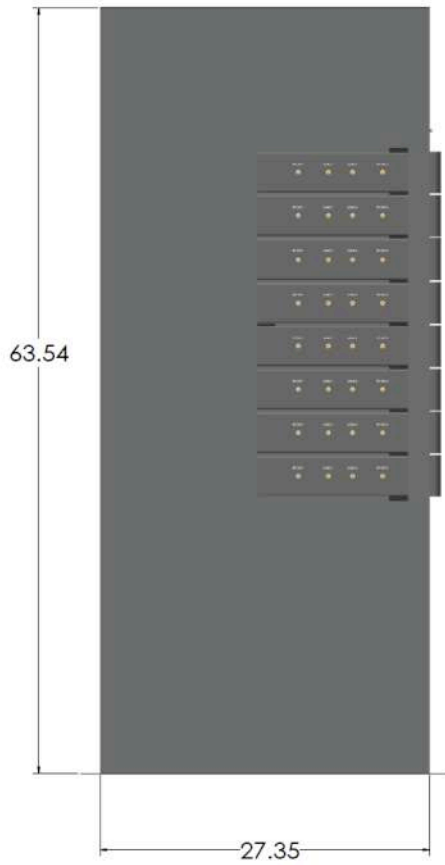


Dual Amplifier Inside View

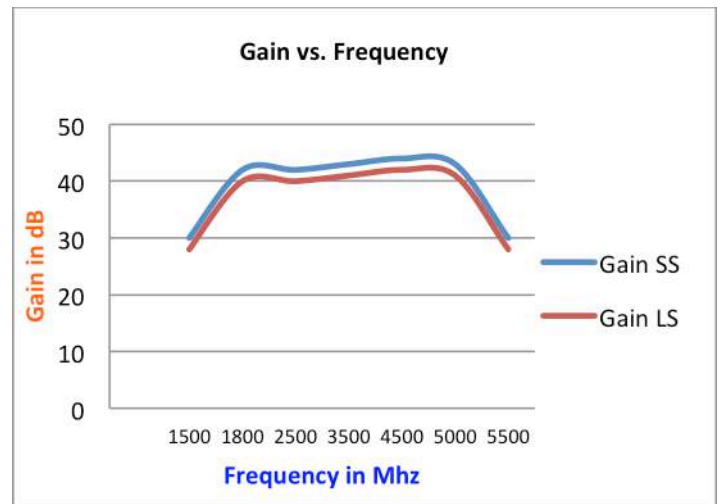
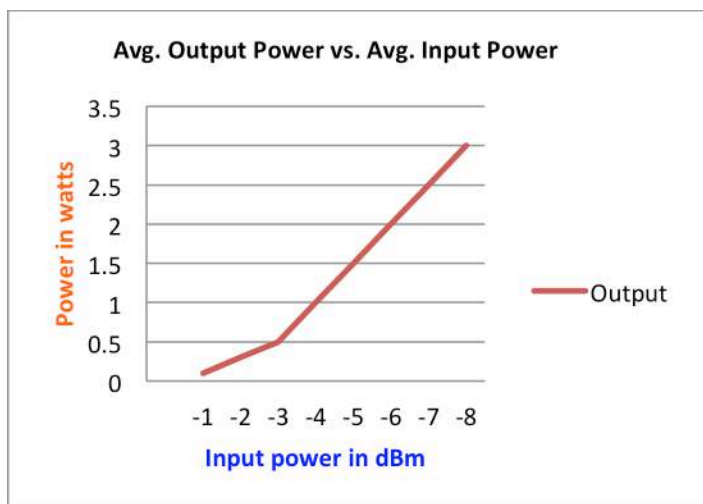


3U height

Mechanical Drawings in inches



System Weight: 330 lbs



Rev 3 08/01/2021:
Specifications subject to change, consult sales for latest information

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