

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 **3-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

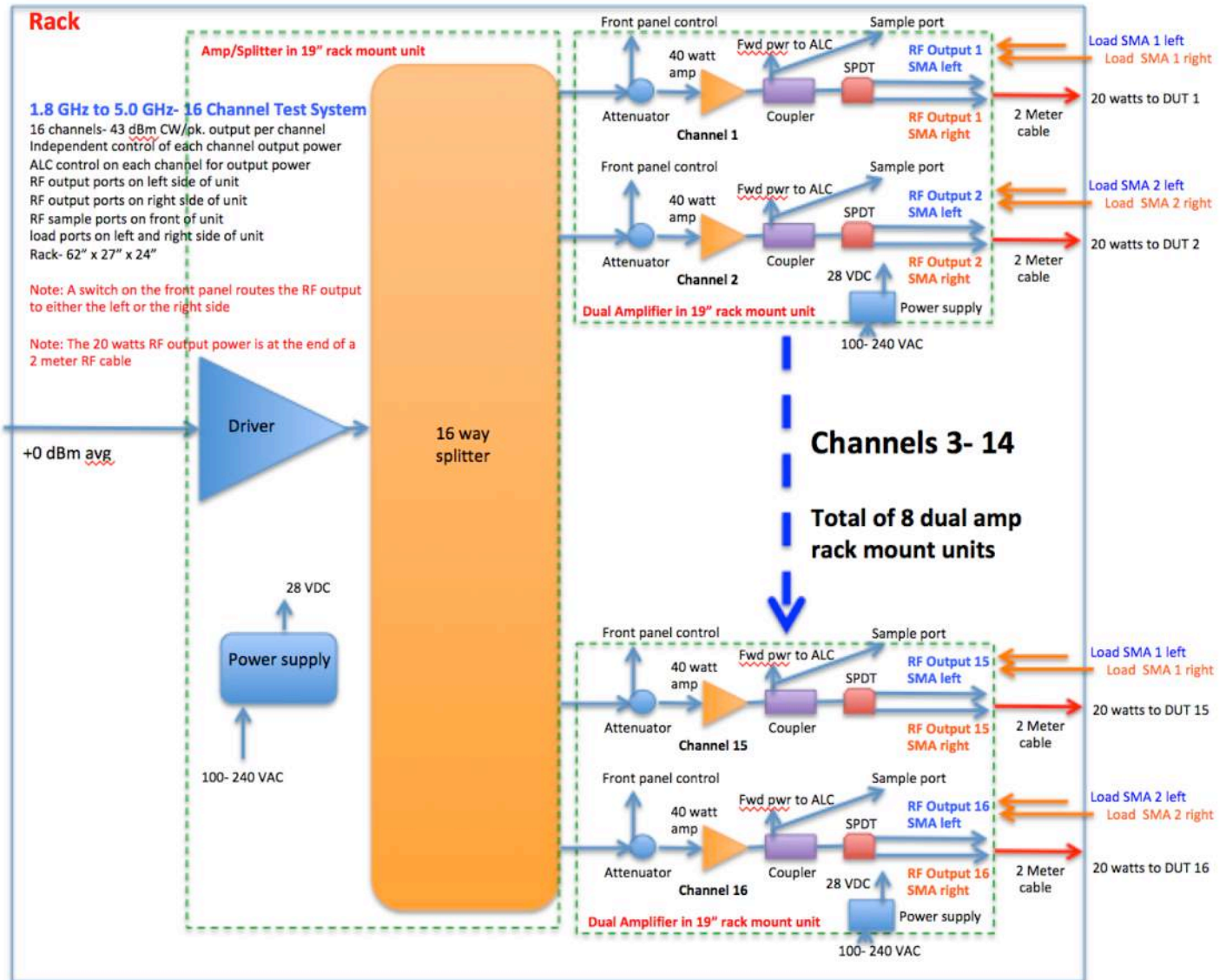
MECHANICAL CHARACTERISTICS

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

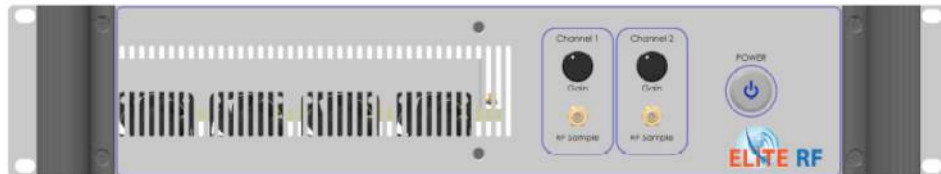
System Block Diagram



Elite RF LLC

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 email us on-line at www.eliterf.com

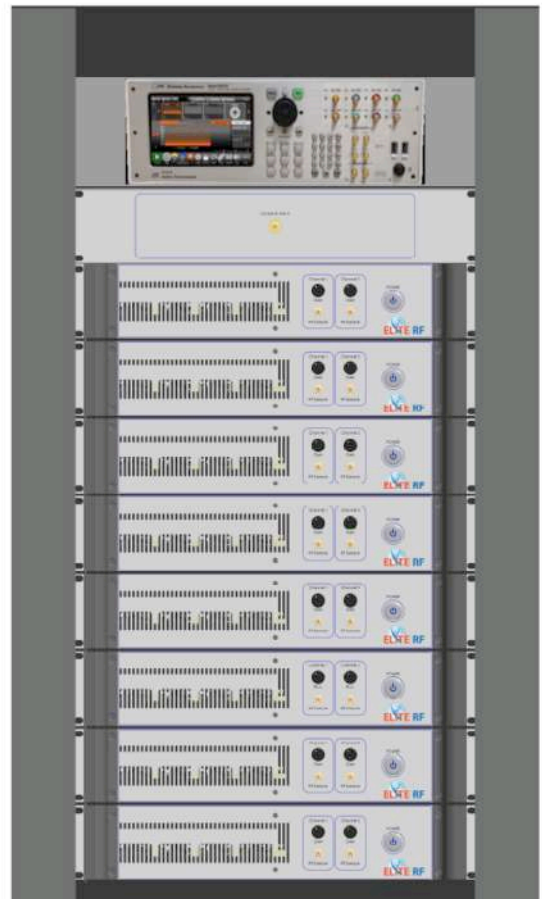
Amplifier Front View



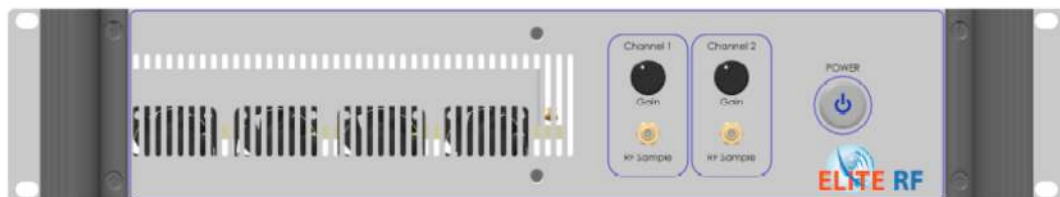
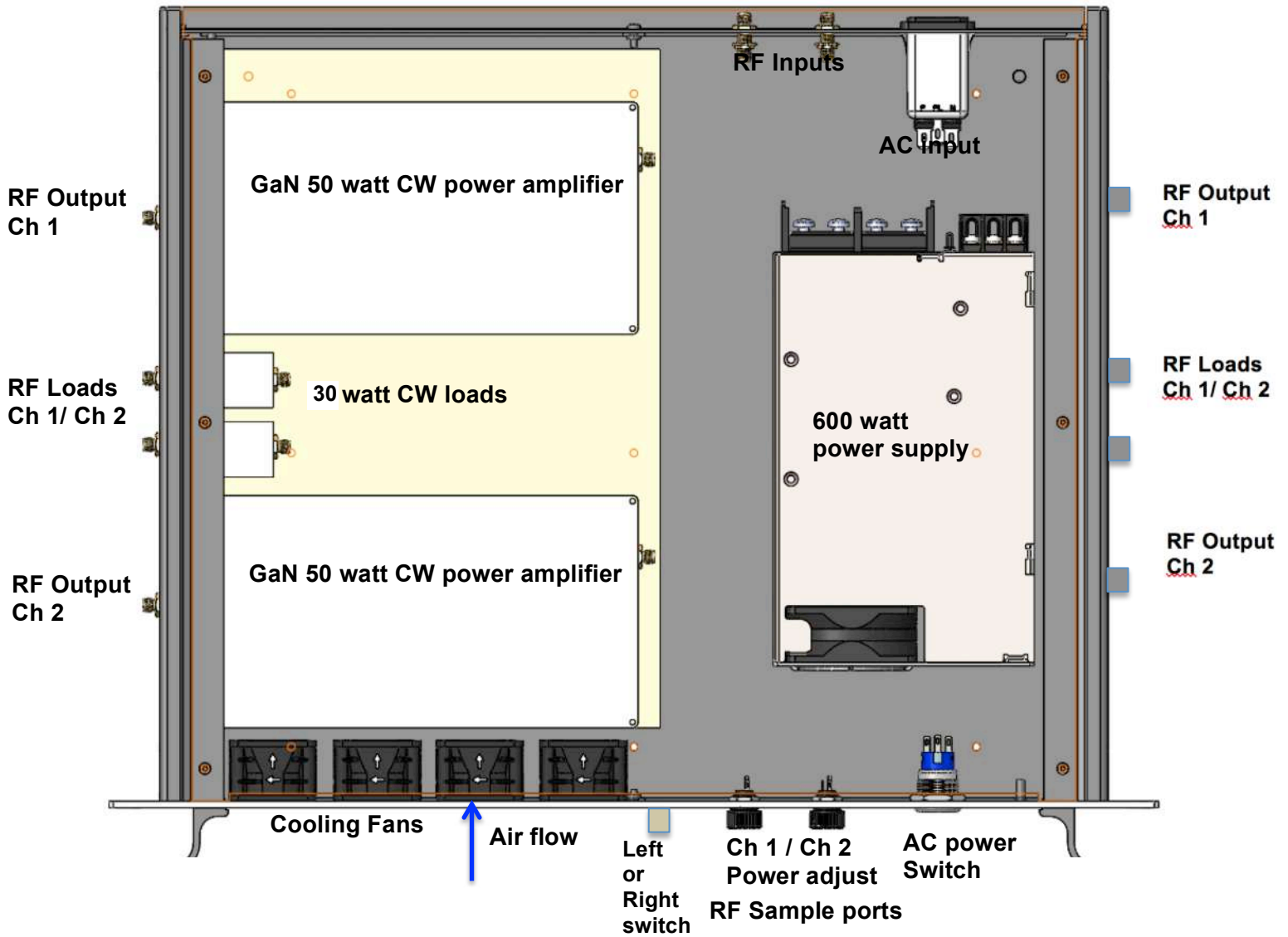
Amplifier Left Side View, Right side has the same 4 SMA connectors, a switch on the front panel controls the signals to the right or left



System Front and Side View

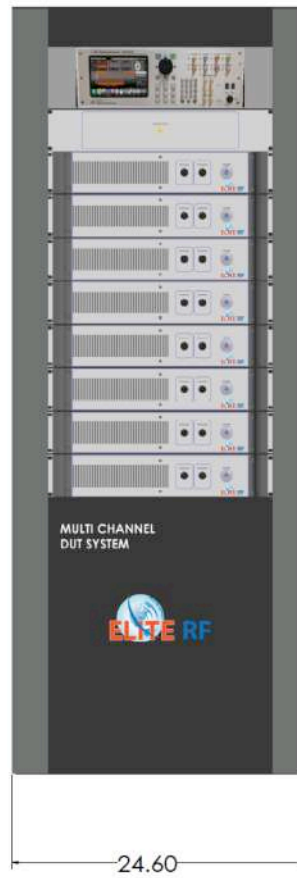
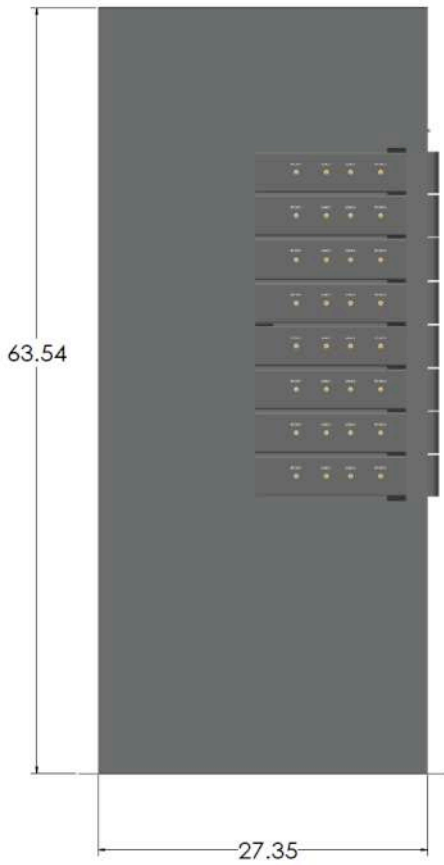


Dual Amplifier Inside View

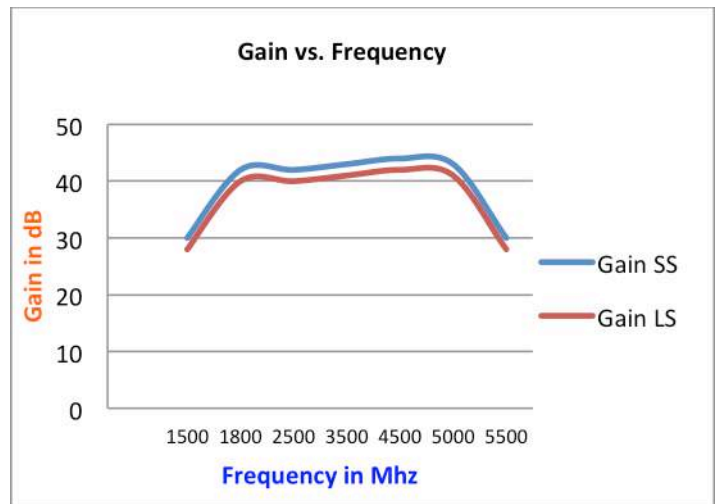
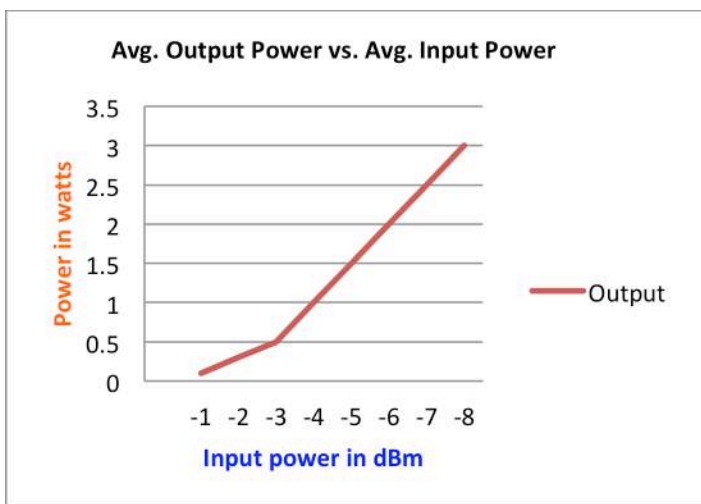


3U height

Mechanical Drawings in inches



System Weight: 330 lbs



Rev 4 08/01/2023:
Specifications subject to change, consult
sales for latest information

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