



5300 Beethoven Street, Los Angeles, CA 90066
 TEL: (310)306-5556 • FAX: (310)821-7413
 WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

MODEL 4081

**700 - 800 MHz
 100 WATTS
 LINEAR POWER RF AMPLIFIER**

Solid State Broadband High Power RF Amplifier

The 4081 is a 100 Watt broadband amplifier that covers the 500 – 1000 MHz frequency range. The bandwidth is limited by the BPF to 700 to 800MHz. This small and lightweight amplifier utilizes Class A/AB linear power devices that provide an excellent 3rd order intercept point, high gain, and a wide dynamic range.

Due to robust engineering and employment of the most advanced devices and components, this amplifier achieves high efficiency operation with proven reliability.

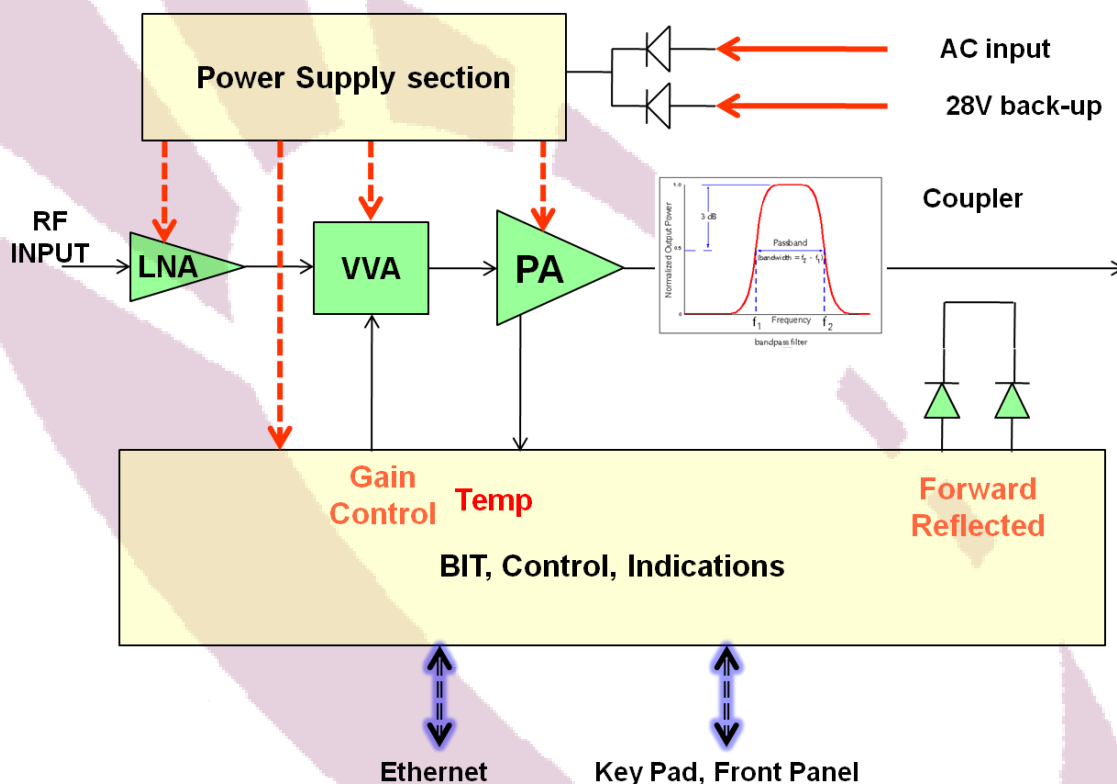
	Parameter	Specification @ 25° C
Electrical		
1	Frequency Range	700 – 800 MHz
2	Output Power @1dB back off	100 Watts min
3	Small Signal Gain	+53 dB min
4	Small Signal Gain Flatness	+/-1.0 dB max with no ALC +/- 0.5dB with ALC
5	BPF rejection	20dB min. at 655 & 850 MHz Ultimate attenuation: 60dB min. VSWR: 1.5:1 in the pass band
6	Input /Output VSWR	2:1 max
7	Harmonics	-60 dBc max
8	Spurious Signals	-60 dBc max
9	Input/Output Impedance	50 Ohms nominal
10	AC Input Power	600 Watts max
11	AC Input	100 – 240 VAC, single phase
12	Back-up DC input	28V nominal
13	RF Input for 100W out	0 dBm nominal
14	RF Input Signal Format	TDMA Burst (20 Msc/slot) & Continuous
15	Class of Operation	A/AB
16	Noise Figure	8dB max
17	Interface	RS232, Ethernet, Front panel
Mechanical		
17	Dimensions	19" x 5.25" x 20"
18	Weight	60 lb. max
19	Front Connectors	Type-N for RF
20	Rear Connectors	AC plug: Standard Terminal lug: 28V back-up RS232 - 9pin D-sub Ethernet - standard
21	Grounding	Chassis, and terminal lug
22	Cooling	Internal Forced Air
Environmental		
23	Operating Temperature	0° C to +50° C
24	Operating Humidity	95% Non-condensing
25	Operating Altitude	Up to 10,000' Above Sea Level
26	Shock and Vibration	Normal Truck Transport



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CIRCUIT PROTECTIONS, INDICATIONS, CONTROL

ETHERNET and/or FRONT PANEL

CIRCUIT PROTECTIONS

- ◇ Thermal Overload
- ◇ Over Current
- ◇ Over Voltage
- ◇ VSWR protection
- ◇ RF Output power level
- ◇ High RF In @ +10dBm

CIRCUIT INDICATIONS

- ◇ Forward Power
- ◇ Reflected power
- ◇ VSWR Fault
- ◇ Temp Fault
- ◇ Gain Setting (VVA) %

CIRCUIT CONTROL

- ◇ Standby (amplifier disable)
- ◇ Gain/power setting with 25dB range
- ◇ VSWR protection Reset
- ◇ ALC On/ Off

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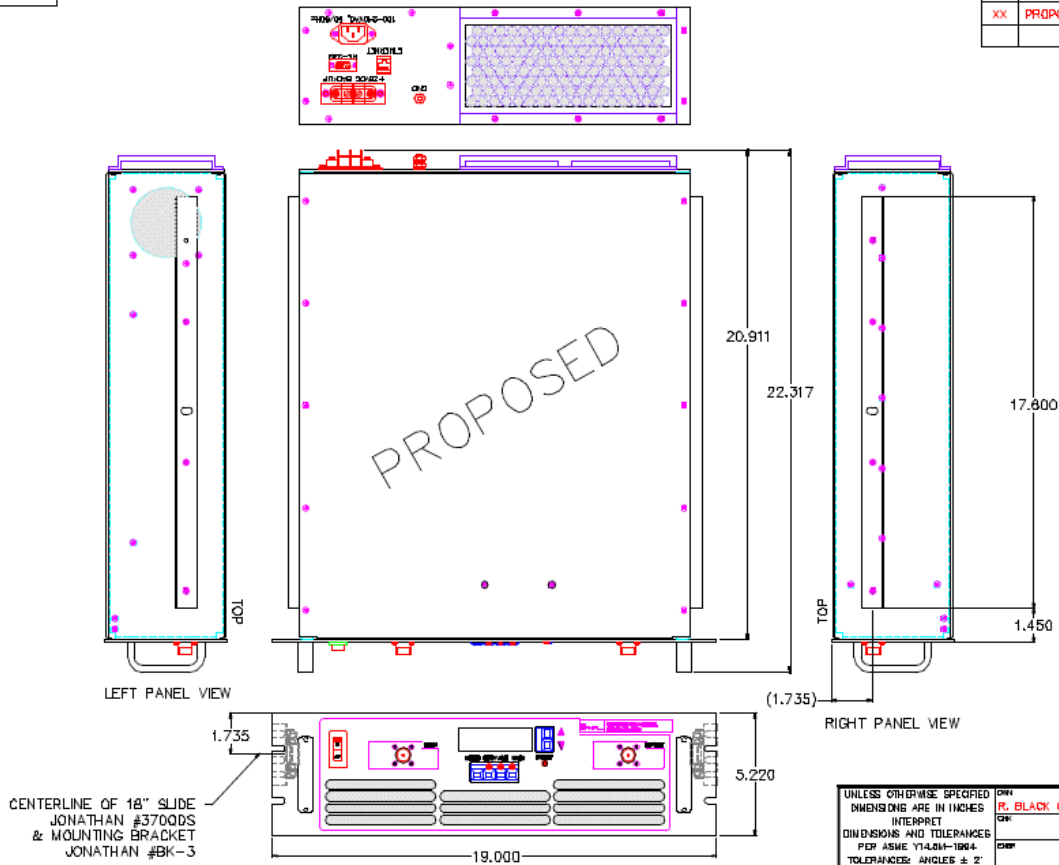
700 - 800 MHz

100 WATTS

LINEAR POWER RF AMPLIFIER

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REVISION HISTORY			
REV	DESCRIPTION	DATE	REVISED BY
XX	PROPOSED	06/03/08	R. BLACK



NOTES: UNLESS OTHERWISE SPECIFIED.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES INTERPRET DIMENSIONS AND TOLERANCES PER ASME Y14.5-1984. SURFACE FINISH: ANGLES ± .004 X.XX = ± .001 XXX = ± .005	DRAWN BY	DATE		5500 BEECHWOOD ST. LOS ANGELES, CA 90066
	R. BLACK	06/03/08		
	CHECKED BY	DATE	TITLE	
	PROPOSED RF AMPLIFIER			
	700-800GHZ, 100W			
	SURFACE FINISH 83	DRAWN BY	DATE	CHECKED BY
THIRD ANGLE PROJECTION	SCALE	1:1	FRACTION 1/8"	1 OF 1
	FILED	DATE	SIZE	A
			B	158L3
			PROPOSED	X1
			408 LIFE	