



5300 Beethoven Street, Los Angeles, CA 90066
TEL: (310)306-5556 • FAX: (310)577-9887
WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

MODEL 5020RE-004

**500-1000 MHz
100 WATTS
LINEAR POWER RF AMPLIFIER**

Solid State Broadband High Power RF Amplifier

The 5020RE-004 is a 100 Watt broadband amplifier that covers the 500-1000MHz frequency range. This small and lightweight amplifier utilizes Class A/AB linear power devices. This unit has two options for the signal source input. One being the standard external signal source, the other being a built in combined dual VCO that is controlled either by the system controller or an external VCO voltage.

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
<u>Electrical</u>		
1	Frequency Range	500-1000 MHz
2	Saturated Output Power	100 Watts typical into 4:1 Load
3	Small Signal Gain	+51 dB min
4	Small Signal Gain Flatness	± 2.0 dB max
5	Output VSWR	Operating up to 4:1 VSWR Protected @ > 4:1
6	Input VSWR	2:1 max
7	Harmonics	> -15 dBc typical @ 60 Watts
8	Spurious Signals	> -40 dBc typical @ 60 Watts
9	Input/Output Impedance	50 Ohms nominal
10	AC Input Power	1250 Watts max
11	AC Input	100 – 240 VAC, single phase
12	RF Input	0 dBm for external input mode
13	RF VCO	Two VCO's 500-800MHz and 800-1000MHz Combined internally
14	RF internal Input Signal Format	Frequency swept at 25KHz
15	Class of Operation	AB
<u>Mechanical</u>		
16	Dimensions	19" x 5.25" x 20"
17	Weight	50 lb. max
18	Connectors	SMA female for two RF inputs Type-N for RF output BNC for external VCOs voltage
19	Grounding	Chassis
20	Cooling	Internal Forced Air
<u>Environmental</u>		
21	Operating Temperature	0° C to +50° C
22	Operating Humidity	95% Non-condensing
23	Operating Altitude	Up to 10,000' Above Sea Level
24	Shock and Vibration	Normal Truck Transport

ORDERING MODELS

◇ RE with Ethernet Connection

CIRCUIT PROTECTIONS

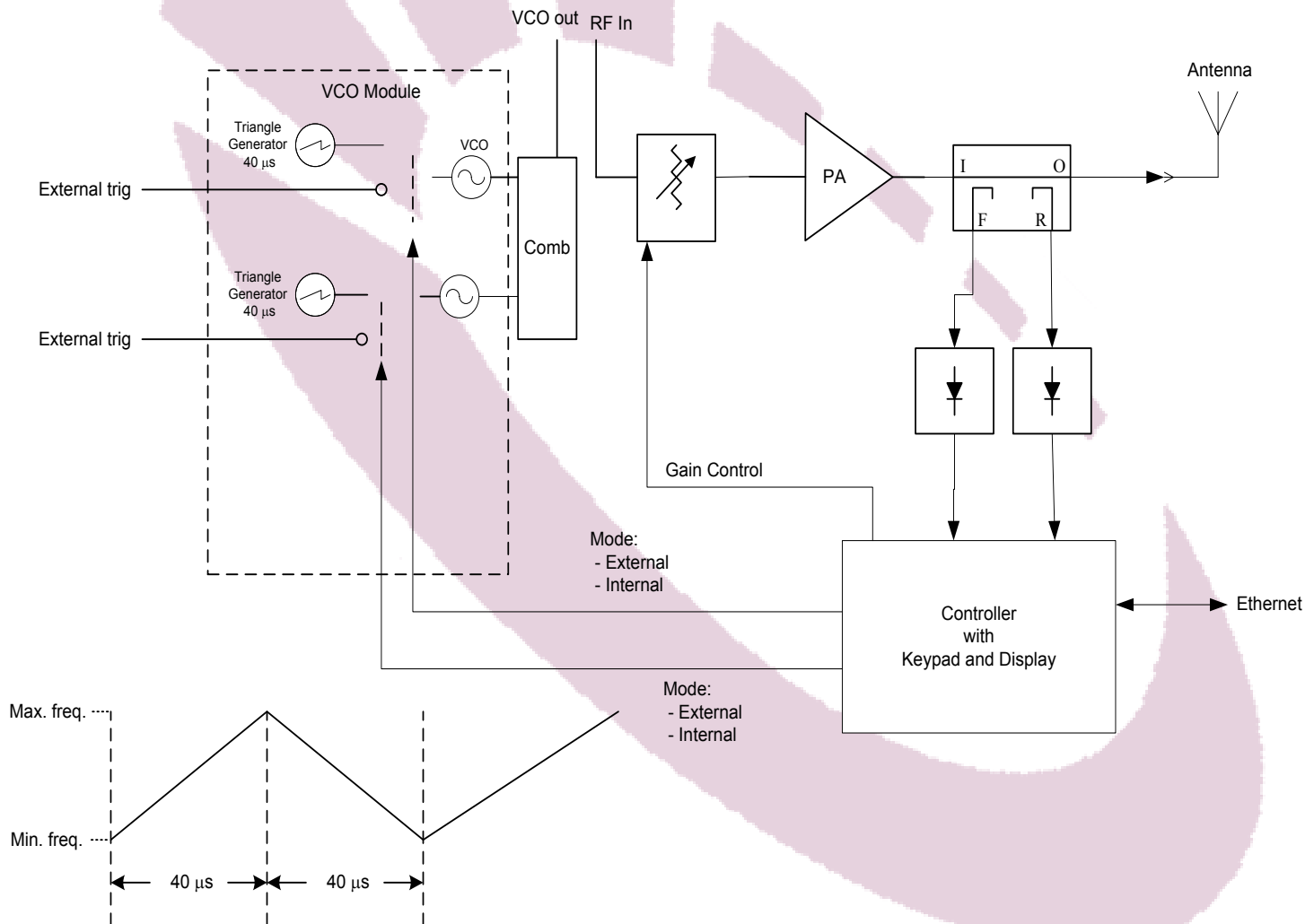
- ◇ Thermal Overload
- ◇ Reflected Power Protection
@ VSWR greater than 4:1
- ◇ Over Voltage



5300 Beethoven Street, Los Angeles, CA 90066
TEL: (310)306-5556 • FAX: (310)577-9887
WEB: www.ophirrf.com • E-MAIL: sales@ophirrf.com

MODEL 5020RE-004

**500-1000 MHz
100 WATTS
LINEAR POWER RF AMPLIFIER**



RE Model Shown