



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 6531
18.0-26.5 GHz
40 WATTS
TWT POWER RF AMPLIFIER

**Broadband High Power TWT
 RF Amplifier**

The Ophir RF Model 6531 is a dual mode Pulse/CW TWT Amplifier which has been designed to operate TWT's at 40 watts in the 18 to 26.5 GHz frequency ranges. The RF output pulse is generated by the focus electrode (grid) pulse. CW operation may be selected by a discrete signal or by the application of +5VDC on the pulse input terminal. RF output pulse is controlled by the input video pulse.

Internal power supplies are DC-DC converter designs with fast loop response times so that output level variations are minimal for any PRF including a non-periodic or burst type PRF. The modular power supplies and grid pulse generator have very low ripple, with attendant low phase noise in the TWT Amplifier.

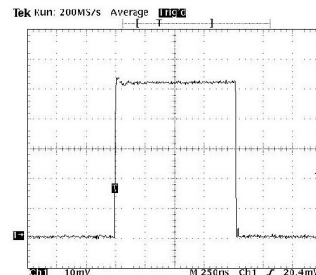
The modular design of the Model 6531 provides convenient accessibility to all elements in the TWT amplifier. Plug-in PC boards are accessible through the front panel. The PC card cover contains a legend for PC card located test points and controls High voltage modules are encapsulated, plug-in assemblies. There is no exposed high voltage.

MODEL 6531 FEATURES

- ◇ - Low Spurious Outputs
- ◇ - Phase and Amplitude Stability
- ◇ - Complete TWT Protection
 - Helix Overcurrent
 - Cathode Over/Undervoltage
 - Collector Overvoltage
 - Filament Low Voltage
 - Over temperature
 - Input Energy Limit
 - Reverse Power Monitor
- ◇ - Custom Requirements
- ◇ - Solid State Except for the TWT
- ◇ - Front Panel Voltage Adjustments
- ◇ - Front Panel Fault Isolation
- ◇ - Modular Construction
- ◇ - DC TWT Filaments
- ◇ - Four Line Display
 - Operating Mode
 - Cathode Voltage
 - Collector Voltage(s)
 - Helix Current
 - Filament and Operate Time
- ◇ - Front Panel Controls
 - Power On / Off
 - Operate
 - Standby
 - Fault Reset
 - Local / Remote

Specifications subject to change without notice

STANDARD ONE YEAR WARRANTY



Detected RF Output





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 6531

18-26.5 GHz
40 WATTS
TWT POWER RF AMPLIFIER

	<u>Parameter</u>	<u>Specification @ 25° C</u>
1	Frequency Range	18-26.5 GHz
2	Saturated Output Power	40 Watts Typical
3	Duty Cycle	Up to 50% Pulse or CW
4	Pulse Width Range	50nS to CW
5	PRF Range	100 KHz
6	RF Rise/Fall Time	15 nS Maximum
7	Phase Noise	Less than +/- 1°
8	Amplitude Variation	0.1 dB Maximum
9	Spurious Outputs	-50dBc Maximum
10	Phase Noise	< +/- 1° pk to pk
11	Delay; Input to RF	200 nS Maximum
12	Noise Figure	35 dB Nominal
13	RF Connectors	Waveguide
14	Primary Power	110-240 VAC +/- 10% 50/60 Hz
15	Operating Temperature	0° to 50° C
16	Weight	90 lbs Nominal
17	Dimensions (H x W x D)	8.75" x 19" x 28.5"

OPTIONAL FEATURES

- ◇ - Driver Amplifier
- ◇ - RF Sample Ports
- ◇ - RS-232/422 Remote Interface
- ◇ - Other Primary Power
- ◇ - Outdoor Enclosure
- ◇ - RF Connectors on Front Panel
- ◇ - Forward/Reverse Power Meter

STANDARD FEATURES

- ◇ - Input Isolator
- ◇ - Filament/ Operate Time
- ◇ - IEEE-488 Remote Interface
- ◇ - Reverse Power Monitor
- ◇ - Switchable Pulse or CW Mode
- ◇ - RF Input waveguide—Type K
- ◇ - RF Output waveguide— Type WR-42

