

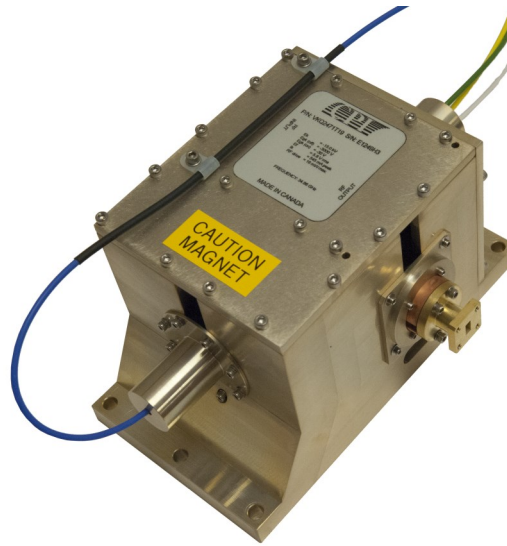
# HIGH POWER mmW AMPLIFIER

## 35 GHz 2500 Watt Pulsed Amplifier

Model VKQ2471 is a series of conduction cooled pulsed Extended Interaction Klystrons used for radar, instrumentation and scientific applications.

Frequencies are available from 34.5 GHz to 35.5 GHz typically producing 2500 Watts peak power with a 1dB bandwidth of 150 MHz. This high gain vacuum electron device is remarkably compact, exceptional reliability and has a highly stable output.

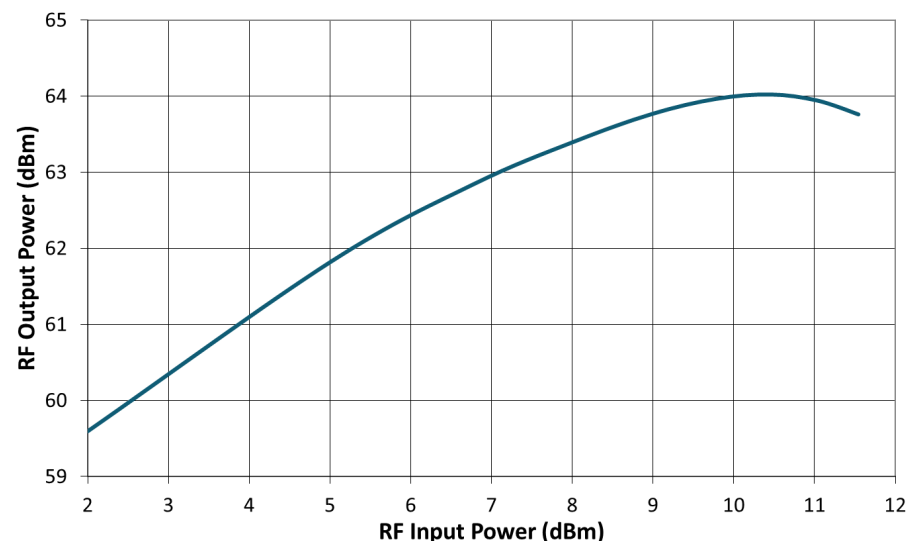
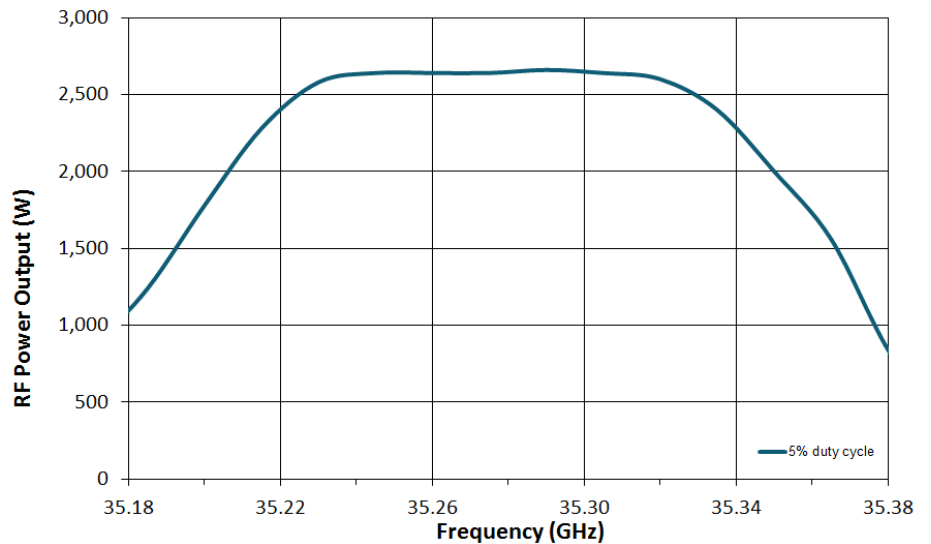
The VKQ2471 series of EIKs may be integrated with the CPI VPW3493 series of power supply/modulators resulting in a compact self-contained and highly reliable transmitter sub-system.

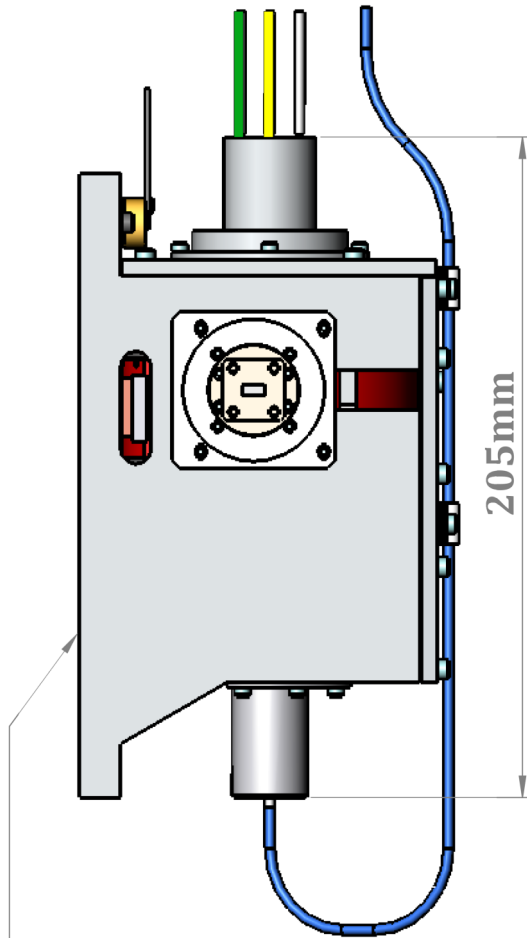


Model VKQ2471

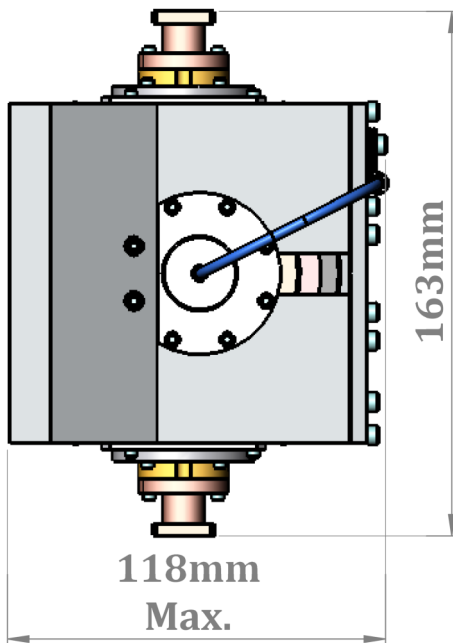
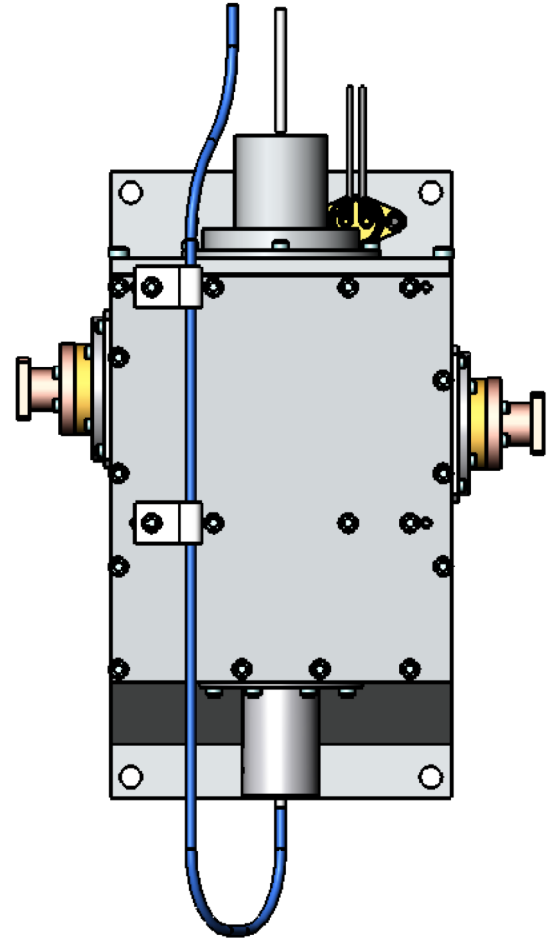
Features	
Center Frequency Range	34.5 to 35.5 GHz
Power Output (Peak)	2,500 W
Bandwidth (-1dB)	150 MHz
Drive Power Saturation	50 mW
Cathode Voltage	-15 kV
Cathode Current	550 mA
Temperature Operating	0 to +50 °C
Temperature Non-operating	-40 to +60 °C
Humidity	95% relative non-condensing
Altitude	3,000 m

Pulse Capability	
Pulse Voltage	+3.0 kV
Pulse Width	Up to 13 $\mu$ s
Duty Cycle	Up to 6%
Rise/Fall Time	10 ns





Mounting Surface & Thermal Interface



### Mechanical

Waveguides	WR-28
Flanges	Rectangular, compatible with UG-599/U
Power Supply Connections	Color Coded Flying Leads 450 mm Max. Length
Weight	7.0 kg Max.

### Options

- Fixed Center Frequency in the range of 33 – 50 GHz
- Space Qualified and Air-borne EIKs
- Power Supply, DC or AC Prime Power
- Duty Cycle up to 6%