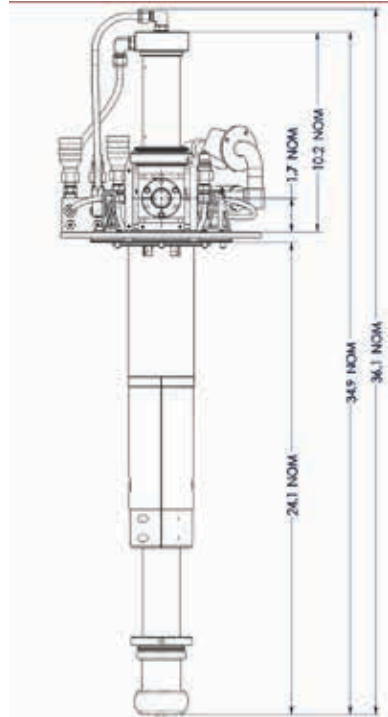


## Communications & Power Industries Gyrotron Oscillator



CPI-MPP provides an extensive line of gyrotrons that generate frequencies from 28 to 263 GHz with power levels ranging from 25 W to 1.4 MW. High power, long-pulse/CW gyrotrons are employed primarily for fusion plasma heating and current-drive.

Lower-power devices are employed for a wide variety of scientific, industrial, and defense applications. The VGY-8026 gyrotron delivers 25 W of continuous output power at a frequency of 263 GHz, and allows for frequency tuning of  $\pm 50$  MHz relative to the nominal center frequency.

### FEATURES:

- Continuous wave (CW) operation
- Stable output power and frequency (requires suitable control system)
- $\pm 50$  MHz frequency tuning
- Diode electron gun
- Operates in a 10 Tesla superconducting magnet with a  $\text{Ø}3.5''$  (89mm) warm bore

### BENEFITS:

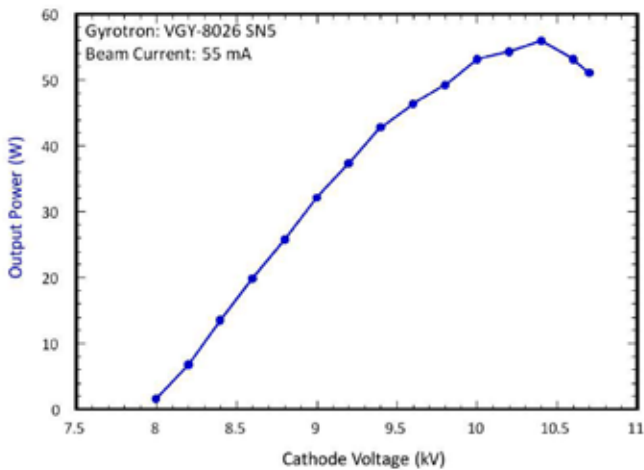
- Tunable
- High power

### APPLICATIONS:

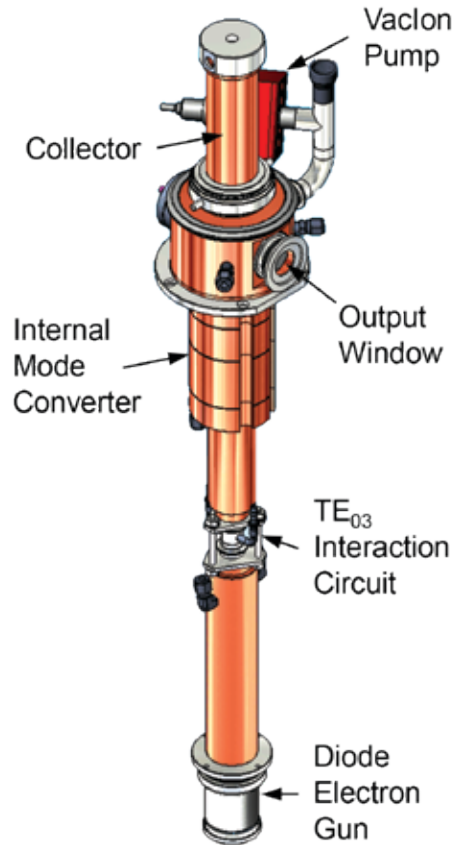
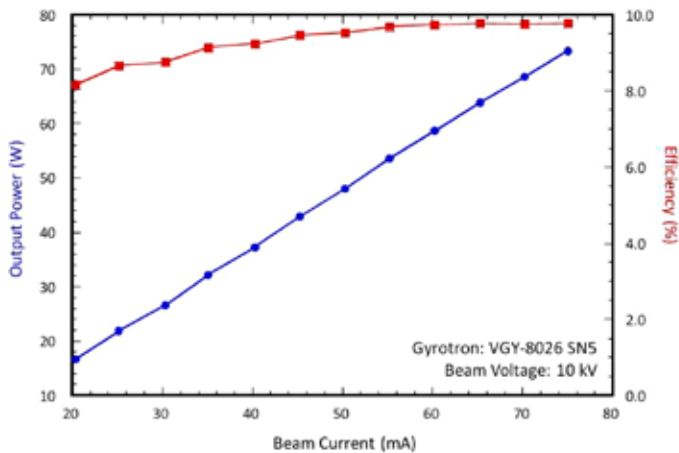
- Radar
- Dynamic Nuclear Polarization
- Industrial heating
- Spectroscopy

# CPI 25 W Gyrotron CW Oscillator: VGY-8026

Output power vs Cathode voltage



Output power vs Beam current



## Typical Operating Parameters

Power output	>25 W
Pulse length	CW
Nominal cathode voltage	10 - 15 kV
Maximum cathode voltage	25 kV
Nominal beam current	~50 mA
Maximum beam current	150 mA
Frequency	263 GHz
Efficiency	1 - 10%
Output mode	TEM 00

With a history of producing high quality products, we can help you with your gyrotron.  
**Contact us at [MPPMarketing@cpii.com](mailto:MPPMarketing@cpii.com) or call us at +1 650-846-2800.**

The data should be used for basic information only. Formal, controlled specifications may be obtained from CPI for use in equipment design.