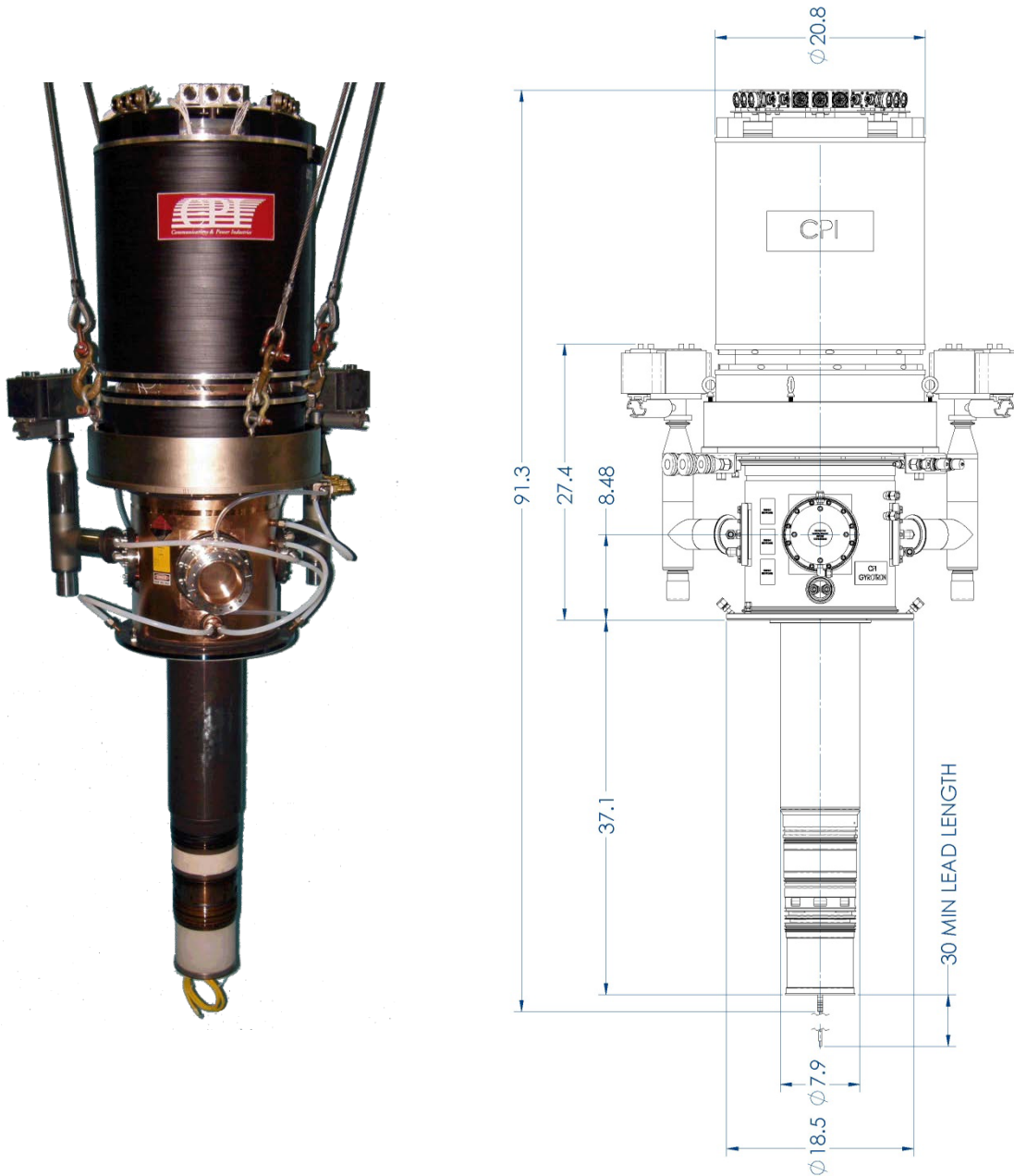


# VGT-8115 Gyrotron Oscillator



CPI gyrotrons were the first commercially available high-power, long-pulse/CW, high-frequency devices for plasma fusion experiments and other scientific and industrial applications. CPI-MPP provides an extensive line of gyrotrons that cover frequencies from 28-263 GHz with power levels ranging from 25 W to 1.4 MW.

The VGT-8115 gyrotron delivers up to 1.2 MW of output power at a frequency of 110 GHz for electron cyclotron heating and current drive in fusion plasmas.



For additional information on gyrotrons, other CPI products, or a copy of our catalog-on-disk, please contact:  
CPI Microwave Power Products, 811 Hansen Way, Palo Alto, CA 94303-0750  
Telephone: 650-846-3172, Fax: 650-856-0705, Email: [marketing@cpii.com](mailto:marketing@cpii.com)

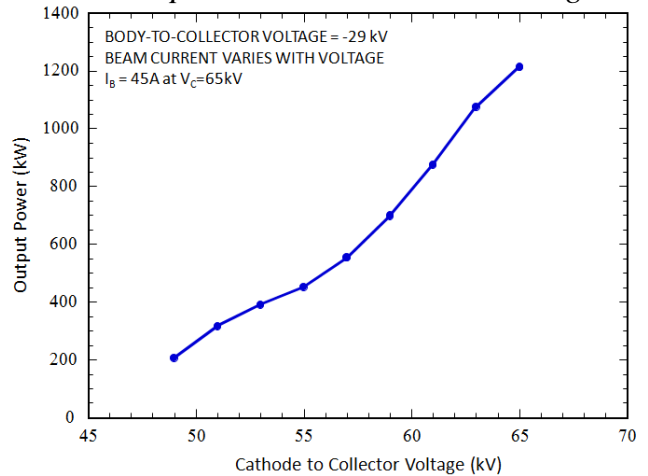
# VGT-8115 Gyrotron Oscillator



## Cathode Stem and Ceramic Assembly



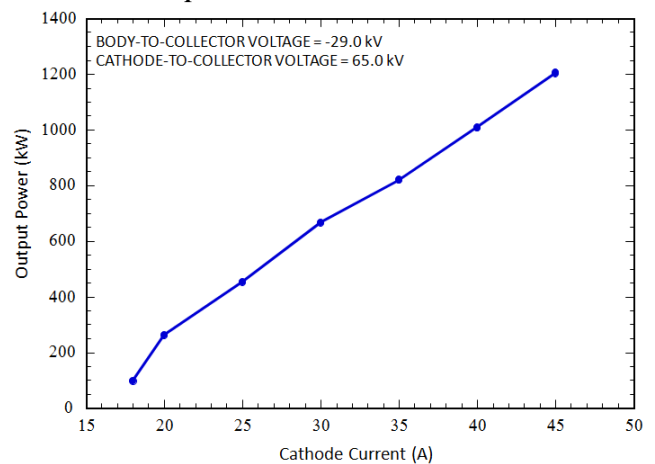
## Output Power vs. Cathode Voltage



## CVD Diamond Window Disc



## Output Power vs. Beam Current



## Features

- High Power, High Efficiency
- Long Pulse Operation
- Gaussian Output Beam
- CVD Diamond Output Window
- Diode Electron Gun
- Single-Stage Depressed Collector
- Cryogen-Free Superconducting Magnet

## Typical Operating Parameters

Power Output	1200 kW
Pulse Length	10 sec
Beam Voltage	94 kV
Cathode Voltage	65 kV
Beam Current	45 A
Frequency	110±0.2 GHz
Efficiency	41%
Gyrotron Weight	1800 lbs
Output Mode	TEM <sub>00</sub>

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