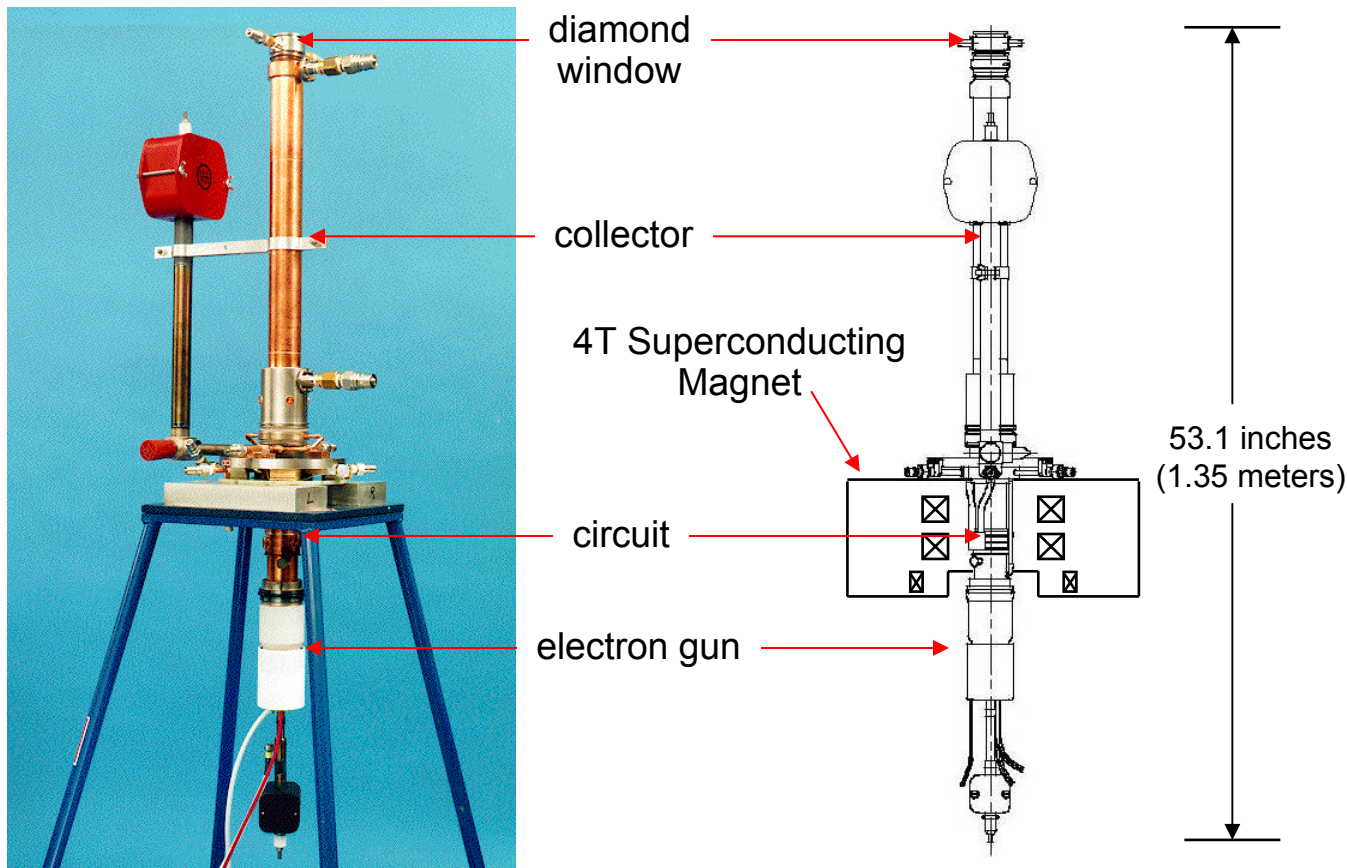


# VGB-8194 Gyrotron Amplifier



CPI gyrotron amplifiers are the only commercially available W-band amplifiers with high peak and average output powers. The VGB-8194, a five-cavity amplifier, can be operated at peak output powers up to 100 kW and average output powers up to 10 kW. The full-width-half-maximum bandwidth is 700 MHz and the saturated gain is 35 dB. A CVD diamond window, developed for use on high-power gyrotron oscillators, has been adapted for the amplifier. The VGB-8194 is available with a refrigerator-cooled 4 Telsa superconducting magnet which does not require liquid cryogenes.



## Features

- High Power
- Broad Bandwidth
- High Gain
- Axial Output
- CVD Diamond Output Window
- Cryogen-Free Superconducting Magnet

## Typical Operating Parameters

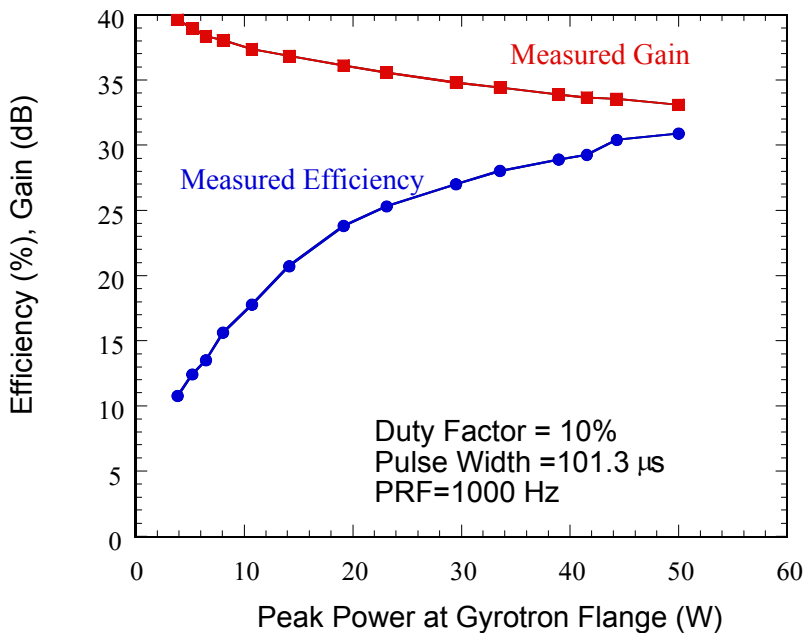
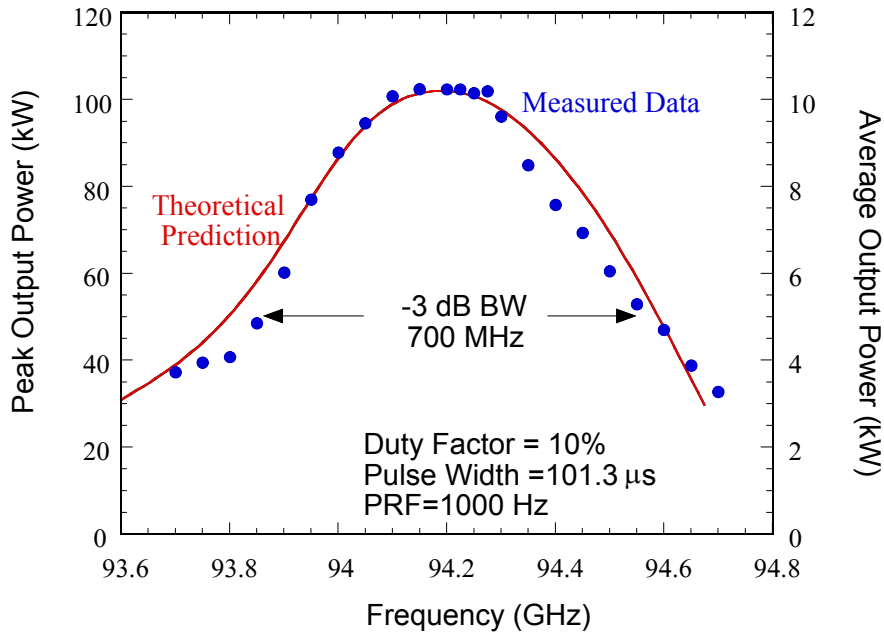
Peak Output Power	100 kW
Avg. Output Power	10 kW
Center Frequency	93.5-94.5 GHz
Bandwidth (-3 dB)	700 MHz
Gain	35 dB
Beam Voltage	65 kV
Mod-Anode Voltage	17 kV
Beam Current	6 A
Output Mode	TE <sub>01</sub>

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)

# VGB-8194 Gyrotron Amplifier



Measured Data for VGB-8194 Serial Number 002  
Center Frequency 94.2 GHz, Cathode Voltage 55 kV, Beam Current 5-6 A



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