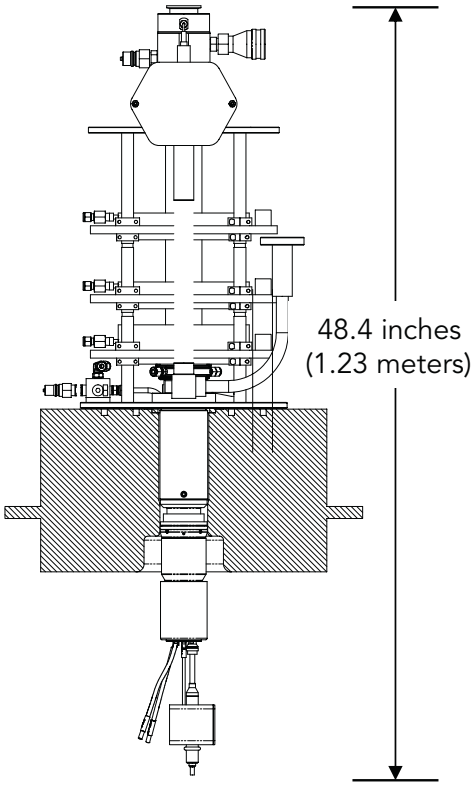
55 kW Gyrotron Amplifier VGB-8193

Communications & Power Industries Gyrotron Amplifier



Typical Operating Parameters

Peak power output	55 kW
Average output power	5.5 kW
Center frequency	92-98 GHz
Bandwidth (-3dB)	1600 MHz
Gain	33 dB
Beam voltage	65 kV
Mod-anode voltage	17 kV
Beam current	6 A
Output mode	TE_{01}

CPI gyrotron amplifiers are the only commercially available W-band amplifiers with high peak and average output powers. The VGB-8193, a five-section gyro-amplifier, can be operated at peak output powers up to 55 kW and average output powers up to 5.5 kW. The full-width-half-maximum bandwidth is 1.6 GHz and the saturated gain is 33 dB. A CVD diamond window, developed for use on high-power gyrotron oscillators, has been adapted for the amplifier. The VGB-8193 is available with a refrigerator-cooled 4 Telsa superconducting magnet which does not require liquid cryogens.

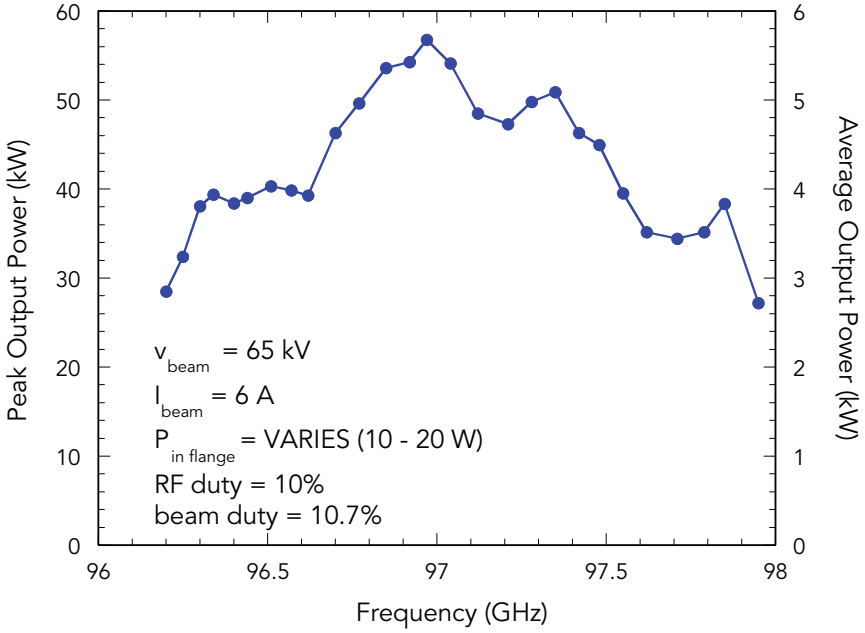
FEATURES:
- High power
- Broad bandwidth
- High gain
- Axial output
- CVD diamond output window
- Cryogen-free superconducting magnet

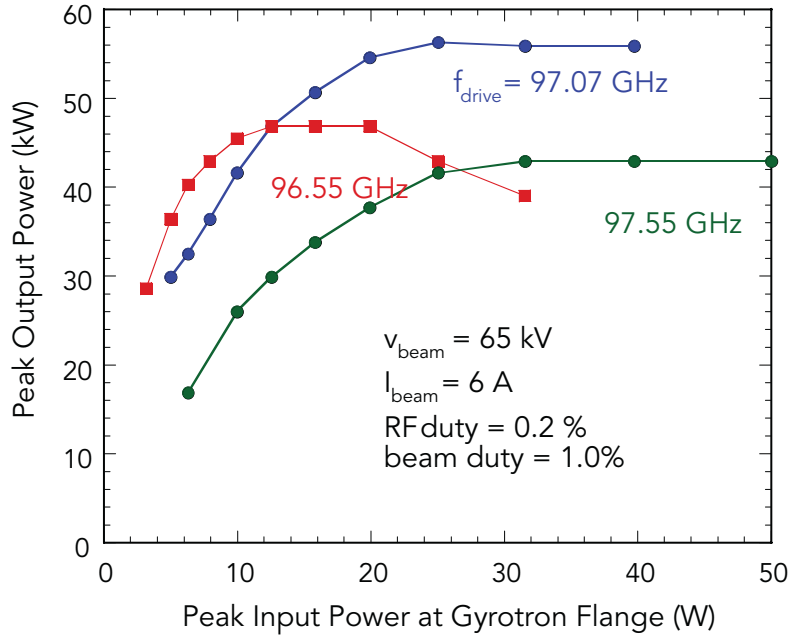
BENEFITS:
- Tunable
- High power

APPLICATIONS:
- Radar
- Dynamic Nuclear Polarization
- Industrial heating
- Spectroscopy

CPI 55 kW Gyrotron Amplifier: VGB-8193

Measured Data for VGB-8193C Serial Number 001
Center Frequency 97 GHz, Cathode Voltage 65 kV, Beam Current 6 A





With a history of producing high quality products, we can help you with your gyrotron.
Contact us at 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.

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For more detailed information, please refer to the corresponding CPI technical description if one has been published, or contact CPI. Specifications may change without notice as a result of additional data or product refinement. Please contact CPI before using this information for system design.

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