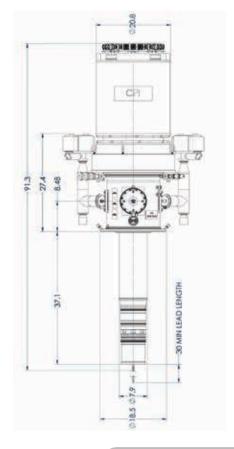
Communications & Power Industries Gyrotron CW Oscillator





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.

FEATURES

- High power, long-pulse
- Gaussian output beam
- CVD diamond output window
- Diode electron gun
- Cryogen-free superconducting magnet

BENEFITS:

- Long pulse & CW capable
- Broad frequency range of gyrotrons

APPLICATIONS:

- Electron cyclotron heating
- Fusion reactors
- Current drive in reactors



CPI 1200 kW Gyrotron CW Oscillator: VGT-8115

Typical Operating Parameters

Power output	1200 kW
Pulse length	10 sec
Body voltage	94 kV
Cathode voltage	65 kV
Beam current	45 A
Frequency	110 ± 0.2 GHz
Efficiency	41%
Gyrotron weight	1800 lbs (816.47 kg)
Output mode	TEM ₀₀

Cathode stem and ceramic assembly

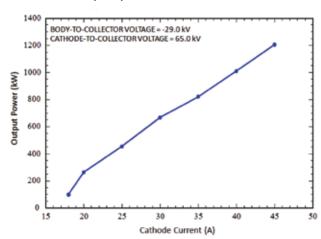


CVD diamond window disc

Output power vs Cathode Voltage 1400 BODY-TO-COLLECTOR VOLTAGE = -29 kV BEAM CURRENT VARIES WITH VOLTAGE 1000 1000 400 400 200 45 50 55 60 65 70

Output power vs Beam current

Cathode to Collector Voltage (kV)



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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