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 28-140 GHz with power levels ranging from 10 kW to 1.3 MW.

The VGB-8084A gyrotron delivers output power levels up to 600 kW at a frequency of 84 GHz.
**VGB-8084A Gyrotron Oscillator**

*Power & Efficiency vs. Beam Voltage*

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**Graph:**
- **Cathode Voltage = 56 kV, Beam Current = 18 to 25 A (varies with beam voltage)**
- **OUTPUT POWER**
- **EFFICIENCY**

**Graph Axes:**
- **Beam Voltage (kV)**
- **Power Out (kW)**
- **Efficiency (%)**

**Features:**
- Gaussian Output Beam
- CVD Diamond Output Window
- Diode Electron Gun
- Single-Stage Depressed Collector
- Long Hold-Time Superconducting Magnet

**Typical Operating Parameters:**
- Power Output: 600 kW
- Pulse Length: 2 sec
- Cathode Voltage: -60 kV
- Body Voltage: +20 kV
- Beam Current: 25 A
- Frequency: 84±0.2 GHz
- Efficiency: 40%
- Gyrotron Weight: 1800 lbs
- Output Mode: TEM\(_{00}\)

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For additional information on gyrotrons, other CPI products, or a copy of our catalog-on-disk, please contact:

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