

CPI/Microwave Power Products (MPP) offers IOT's for particle accelerator applications. Integral Cavity Inductive Output Tubes (IC IOT) have been created by utilizing the fundamental electrical design of our external cavity IOT used in terrestrial UHF television broadcasting and incorporating conventional klystron cavity and coupling technology. The VKP-9070A is an IC IOT that provides 80 kW CW from 650 to 805 MHz. CPI also offers IC IOT's that provide 90 kW CW at 500 MHz and 30 kW CW or 90kW pulsed at 1300 MHz.

## FEATURES

- Coaxial Output Window with Alumina Ceramic
- Water-cooled collector, cavity, and coupling loop
- Air cooled input circuit and electron gun
- Compact size with "collector (water) down"
- Requires VYW-9070A (Magnet, I/P circuit, & Stand)



## TYPICAL OPERATING PARAMETERS

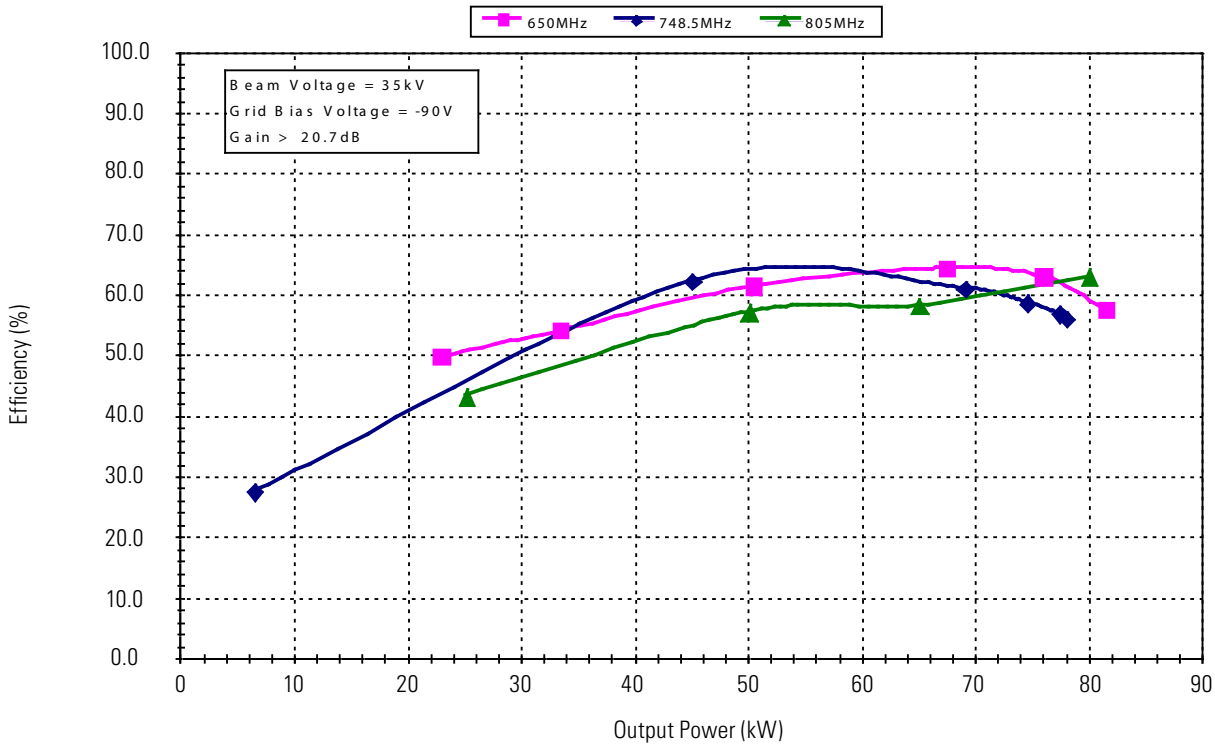
<b>Frequency</b>	<b>650-805</b>	<b>MHz</b>
<b>Output Power</b>	<b>80</b>	<b>kWatts</b>
<b>Duty</b>	<b>CW</b>	<b>---</b>
<b>Beam Voltage</b>	<b>37</b>	<b>kV</b>
<b>Beam Current</b>	<b>3.6</b>	<b>A</b>
<b>Drive Power</b>	<b>500</b>	<b>Watts</b>
<b>-1dB Bandwidth</b>	<b>1.5</b>	<b>MHz</b>
<b>Gain</b>	<b>&gt;20</b>	<b>dB</b>
<b>Efficiency</b>	<b>&gt;60%</b>	<b>---</b>
<b>VYW-9070A ELECTROMAGNET:</b>		
<b>Main Coil Current</b>	<b>15-25</b>	<b>A</b>
<b>Main Coil Voltage</b>	<b>7.5 ±3</b>	<b>V</b>
<b>IOT SIZE with ACCESSORIES:</b>		
<b>Height</b>	<b>22 / 57.2</b>	<b>inches / cm</b>
<b>Weight</b>	<b>50 / 23</b>	<b>pounds / kg</b>
<b>IOT SYSTEM SIZE with ACCESSORIES:</b>		
<b>Height</b>	<b>39 / 99</b>	<b>inches / cm</b>
<b>Weight</b>	<b>268 / 121</b>	<b>pounds / kg</b>

The values listed above represent specified limits for the product and are subject to change. The data should be used for basic information only. Formal, controlled specifications may be obtained from CPI for use in equipment design.

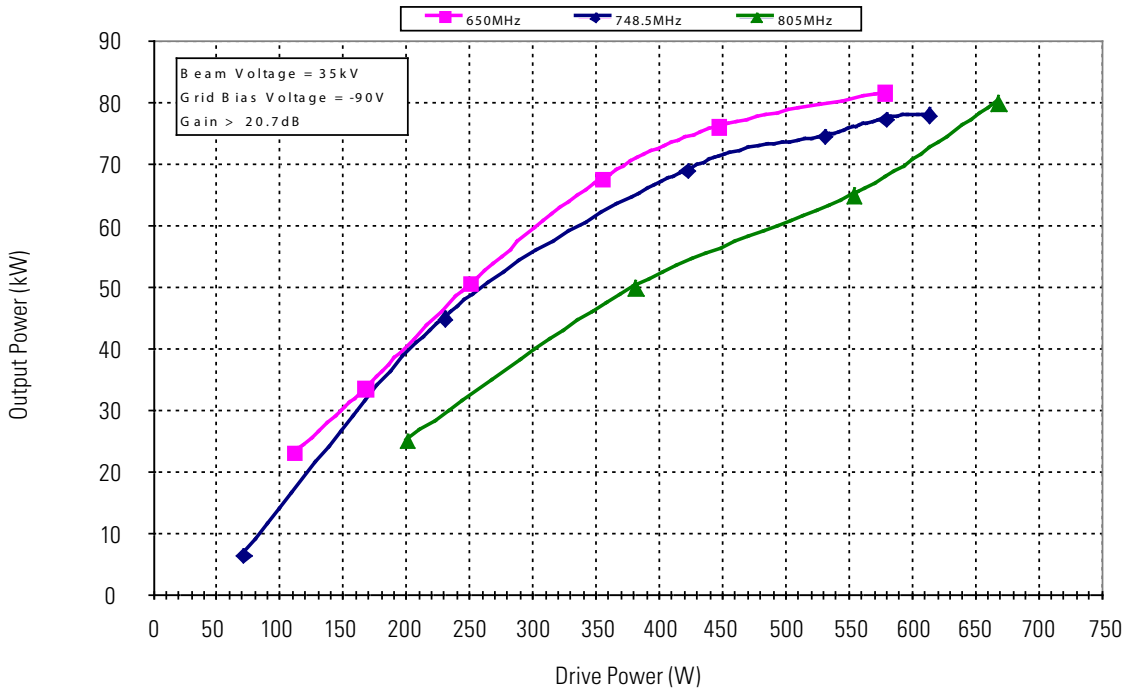


**For information** on this and other CPI products, visit our website at: [www.cpii.com](http://www.cpii.com),  
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## EFFICIENCY VERSUS OUTPUT POWER



## OUTPUT POWER VERSUS DRIVE POWER



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