

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-9050A is an IC IOT that provides 90 kW CW at 500MHz. CPI also offers IC IOT's that provide 80 kW CW from 650 MHz to 805 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-9050A (Magnet, I/P circuit, & Stand)



VKP-9050A with VYW-9050A

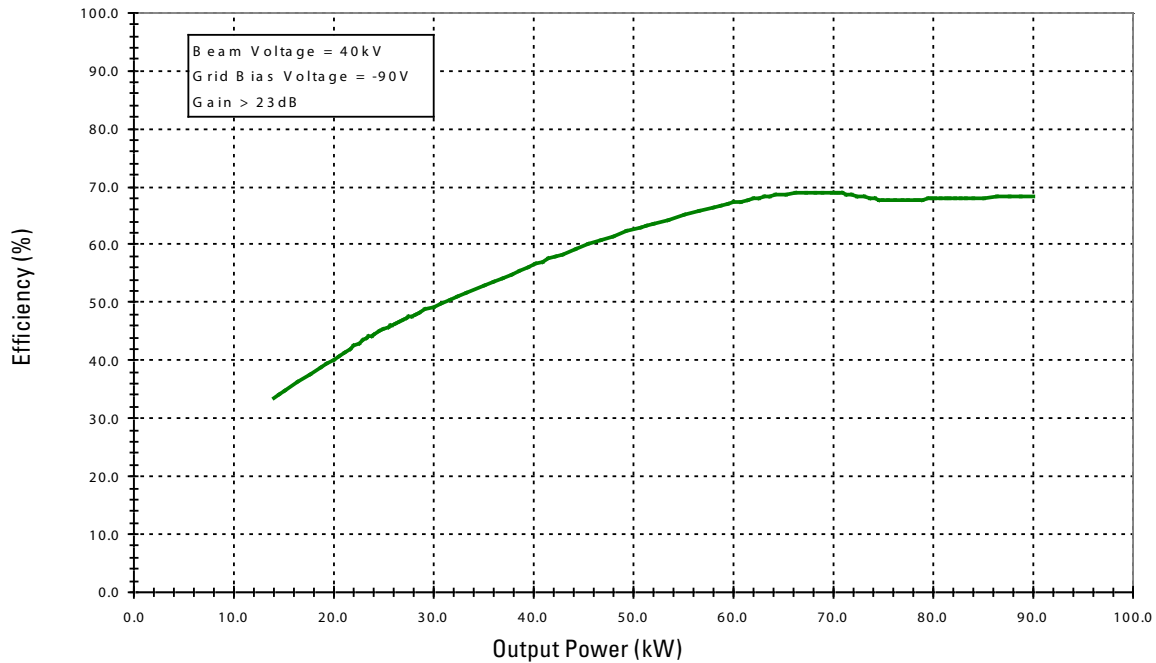
TYPICAL OPERATING PARAMETERS		
Frequency	500	MHz
Output Power	90	kWatts
Duty	CW	---
Beam Voltage	40	kV
Beam Current	3.5	A
Drive Power	<500	Watts
-1dB Bandwidth	2.6	MHz
Gain	>22	dB
Efficiency	>65%	---
<b>VYW-9050A ELECTROMAGNET:</b>		
Main Coil Current	15-25	A
Main Coil Voltage	7.5 $\pm$ 3	V
<b>IOT SIZE with ACCESSORIES:</b>		
Height	24 / 61	inches / cm
Weight	150 / 68	pounds / kg
<b>IOT SYSTEM SIZE with ACCESSORIES:</b>		
Height	39 / 99	inches / cm
Weight	550 / 250	pounds / kg

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.

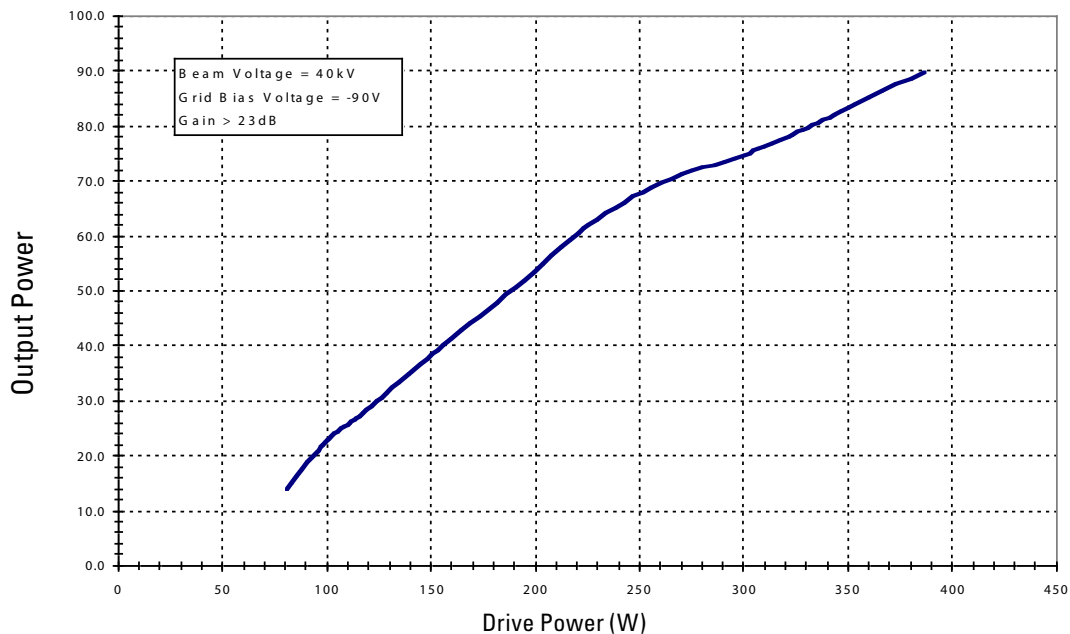


**For information** on this and other CPI products, visit our website at: [www.cpii.com](http://www.cpii.com),  
or contact: CPI MPP Division, 607 Hansen Way, Palo Alto, CA 94303  
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## EFFICIENCY VERSUS OUTPUT POWER



## OUTPUT POWER VERSUS DRIVE POWER



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