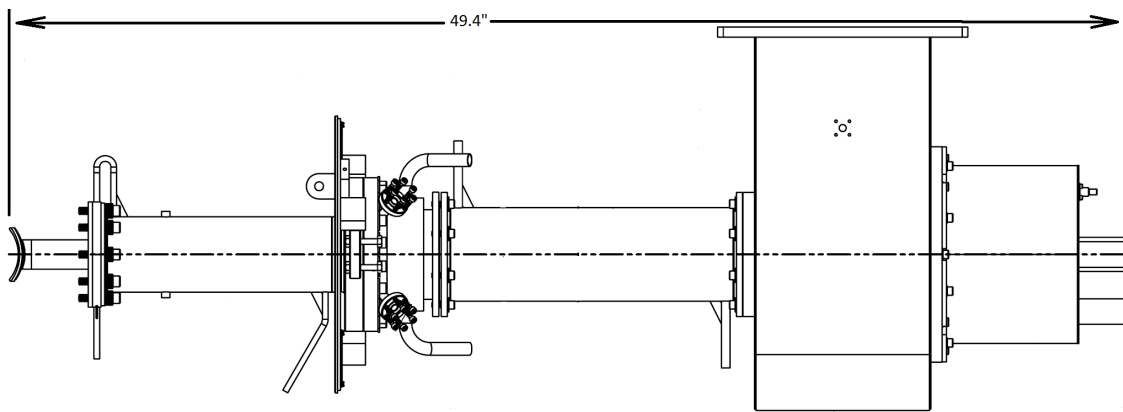
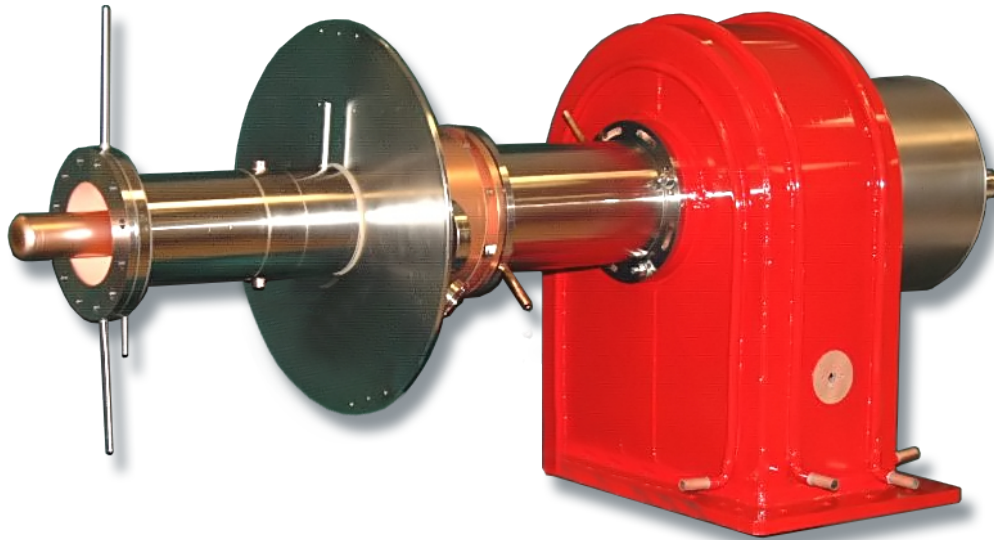


CPI Electron Device Business - Power Coupler Product Specification



The VWP3070 Fundamental Power Coupler was designed for the Brookhaven FEL injector. All components of the coupler are water cooled to handle the high RF power. The design utilizes a TiN coating for multipactor suppression, and high RRR copper plating for low RF loss.

FEATURES:

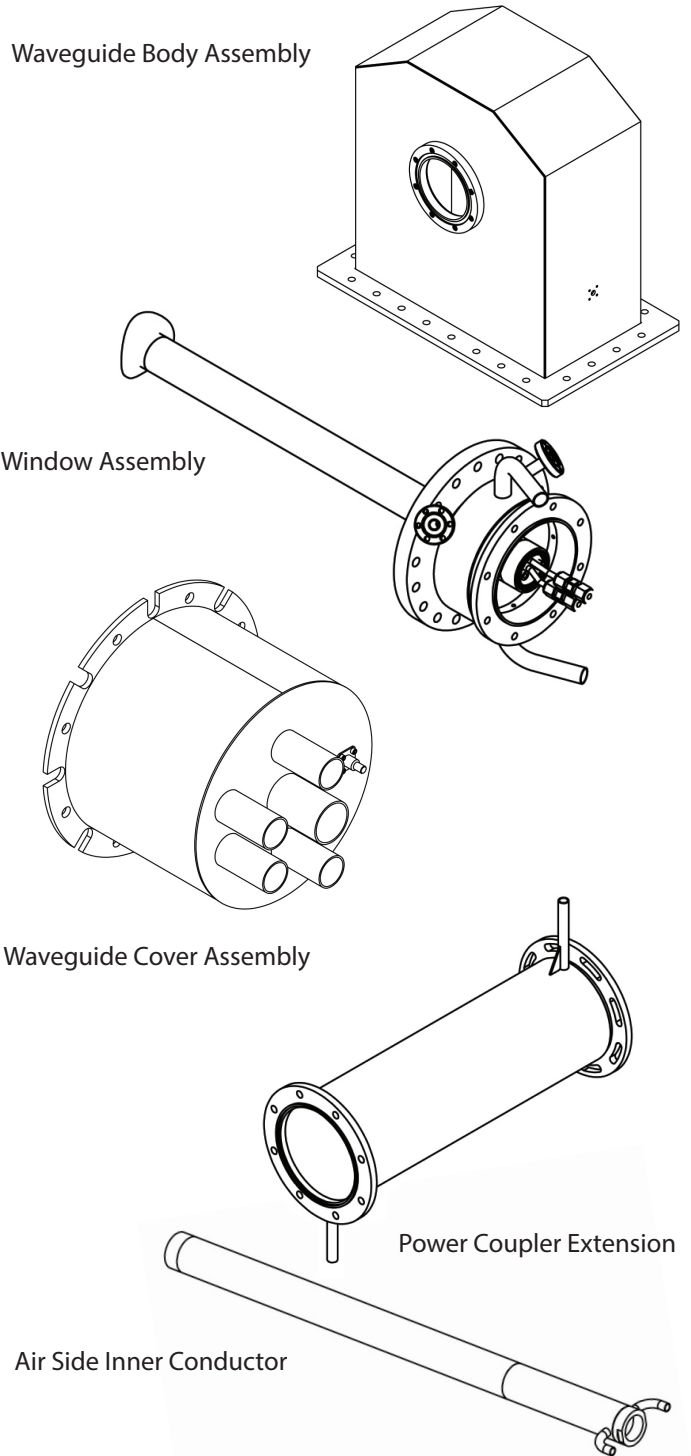
- 500 kW CW
- Water cooled
- Waveguide input
- Single window design
- Inner conductor may be biased

CPI EDB 500 kW CW Power Coupler product specification: VWP3070

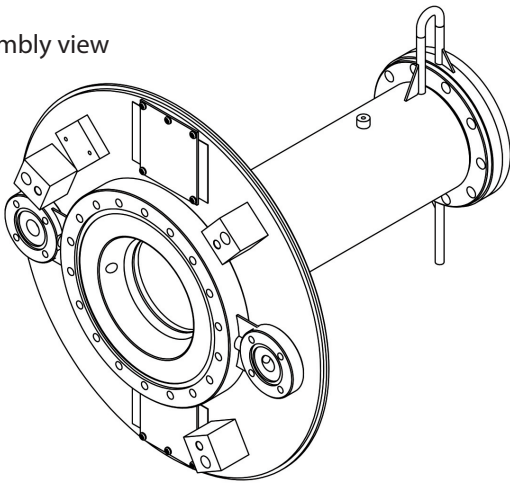
Electrical Parameters

Operating frequency	704 MHz
Maximum CW power: 500 kW CW (Design limit) with matched load	
Vacuum leak rate	$< 10^{-10}$ mbar.L/s
Cold assembly sealing type	Flat Stainless Steel surface Compatible with aluminum Hex seal or Helicoflex gasket
Cold assembly outer conductor diameter	2.981 Inches (7.57 cm)
Water cooling	All RF contacting subassemblies are water cooled

Product can be cleaned in CPI's class 10 clean room after fabrication for an additional charge. If the product is not cleaned in CPI's class 10 clean room, it will need to be done by the customer before the product is conditioned.



Assembly view



Note: Product is supplied with nut and bolt hardware, along with a heater for the Outer Conductor Assembly.



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

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