

CPI Electron Device Business **Power Couplers**

POWER COUPLERS FOR:

- SUPERCONDUCTING ACCELERATORS
- FREE ELECTRON LASER INJECTORS
- SPALLATION NEUTRON SOURCES
- ENERGY RECOVERY LINACS
- X-RAY FREE ELECTRON LASERS
- THIRD HARMONIC CAVITIES

CPI Electron Device Business Power Coupler Products

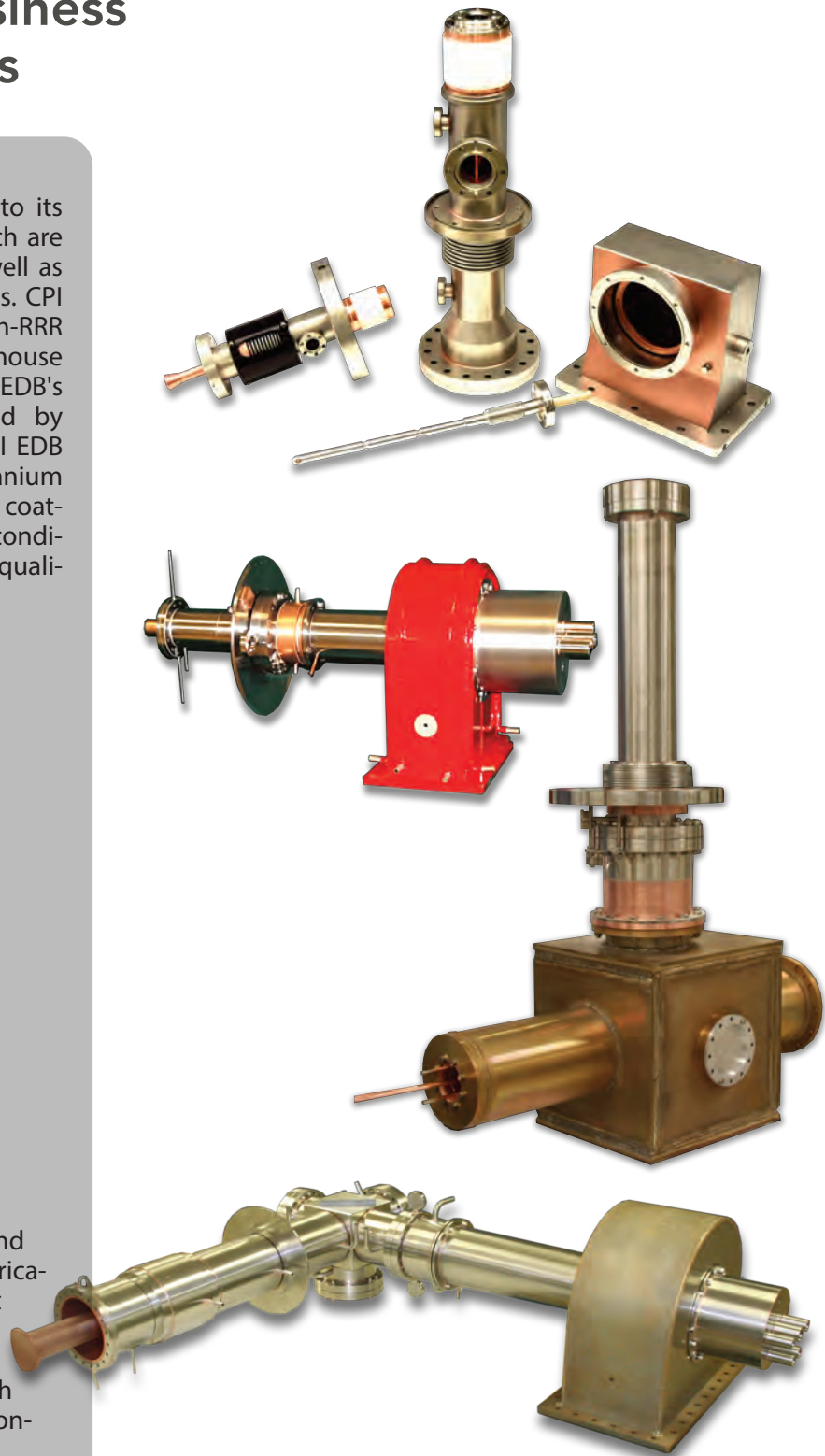
CPI EDB's power couplers are manufactured to its customer's specifications using processes which are standard to the electron device industry, as well as processes which are specific to power couplers. CPI EDB has developed the capability of plating high-RRR copper on stainless steel. Plating is done in-house under carefully controlled conditions. CPI EDB's high-RRR copper plating has been qualified by Cornell, DESY, SLAC, XFEL, and CEA Saclay. CPI EDB has developed the capability of applying titanium nitride (TiN) coatings to ceramic windows. TiN coating is done in-house under carefully controlled conditions. CPI EDB's TiN coating process has been qualified at DESY.

CPI EDB has:

- Installed a class 10 (ISO-4) clean room for power coupler cleaning and assembly to XFEL standards. The class 10 clean room and associated procedures have been vetted by accelerator scientists, power coupler experts, and vacuum specialists from XFEL, DESY, SLAC, and JLAB.
- Installed two bake out stations for the LCLS-II program.
- Extensive experience working with the world's best accelerator scientists and engineers to fabricate power couplers for superconducting accelerators.

CPI EDB is currently manufacturing 300 power couplers for the XFEL and LCLS-II accelerators and has built up the necessary infrastructure for fabrication and assembly at rates necessary to support these programs.

At CPI Electron Device Business, we provide high quality microwave products supporting superconducting linear accelerators.



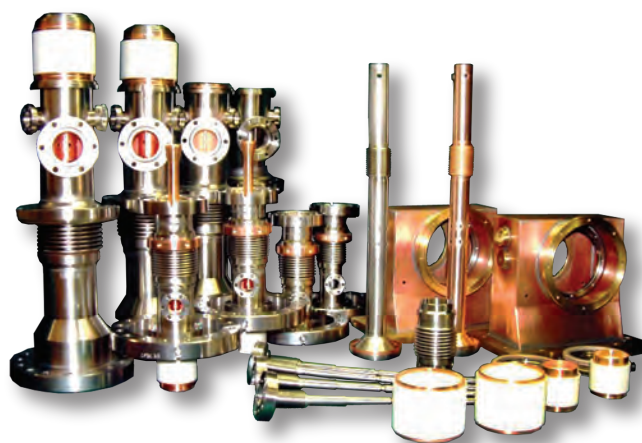
Check out all our power coupler products
at www.cpi-edb.com



CPI EDB Power Couplers

CPI Electron Device Business Power Couplers customized for your application.

Contact us at
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 or at call us at +1 978-922-6000



CPI EDB Mod Number	Accelerator Application	Freq. (MHz)	Peak Power (kW)	Avg. Power (kW)
VWP3097	IFMIF Prototype (CEA Saclay)	175	200	200
VWP3098	FRIB Prototype (MSU)	322	14	14
VWP3124	RFQ (ORNL)	402	14	14
VWP2107	NSLSII (AES, BNL)	500	500	500
VWP3070	FEL Injector (AES, BNL)	704	500	500
VWP1185/86	FEL Injector (AES, JLAB)	748	350	350
VWP1133	SNS Prototype (JLAB)	805	1000	60
VWP1162	RIA Prototype (MSU)	805	1000	10
VWP1137	Tesla Test Facility (CNRS Orsay, DESY)	1300	1100	7.2
VWP3049	ILC Test Area (Fermi, SLAC and Triumf)	1300	1100	7.2
VWP3126	XFEL (EuXFEL)	1300	1100	7.2
VWP3130	SLAC (LCLS -II)	1300	7	7
VWP3032	ERL Injector (Cornell and Triumf)	1300	75	75
VWP3069	ERL Injector (Daresbury)	1300	75	75
VWP3113	SRF (Peking University)	1300	50	50
VWP3108	ERL (Cornell)	1300	5	5
VWP3088	XFEL Third Harmonic Cavity (Fermi, Desy)	3900	45	12.5



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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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