



plasma process group

I-BEAM™ 703 RFS/RFN All-In-One Power Supply



- **Includes Beam, Accelerator, Neutralizer, and RF Power Supplies in one single unit**
- **All ion source parameters displayed continuously on large bright LEDs**
 - **Enables real-time monitoring of ion source and process performance**
- **Flexible control modes - manual, automatic (local), and remote**
 - **Gives full control over the process by either computer or operator**
- **Highest quality and state of the art electronics for durability, dependability and long life**
- **Complete CE certification and RoHS compliant**
- **Separate display and keypad for programming, simplifying setup and operation**

Description

The I-BEAM™ 703 RFS/RFN Power Supply provides power for an RF ion beam source and RF neutralizer with a built-in 500 watt RF generator. The I-BEAM™ 703 RFS/RFN is specifically designed to optimize performance of Plasma Process Group's RF ion beam sources, and, when paired with a Plasma Process Group 16cm Ion Source Package, can output up to 800mA of ion beam current using just the built-in generator. The I-Beam™ 703 will operate gridded RF ion beam sources from other manufacturers as well.

For production applications, the I-BEAM™ 703 RFS/RFN is designed for reliability and ease of use. Control modes allow operation either from the front panel or remotely through the RS-232 interface. In remote control mode, operating parameters are set via the interface. In local

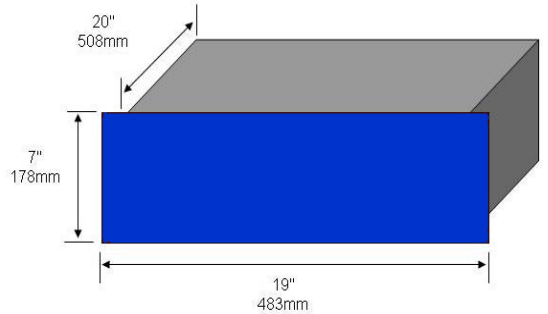
control mode, the power supply adjusts parameters automatically based on preset values, minimizing operator intervention or error. Up to 9 sets of operating parameters can be stored in the power supply.

The I-BEAM™ 703 RFS/RFN is also well suited for research & development applications. A separate display and keypad make setup and operation quick and easy. All ion source operating parameters are displayed continuously on individual large LED displays. Manual control mode gives the operator full control of all parameters, allowing quick response to those unexpected circumstances typical of research.

Whether you're in a research or production environment, Plasma Process Group is committed to providing you with the best support possible. Help is never more than a phone call away (or email if you prefer). Our people have many years of experience with ion beam sources, systems, and applications, and we're happy to share that with you. Give us a call.

Specifications

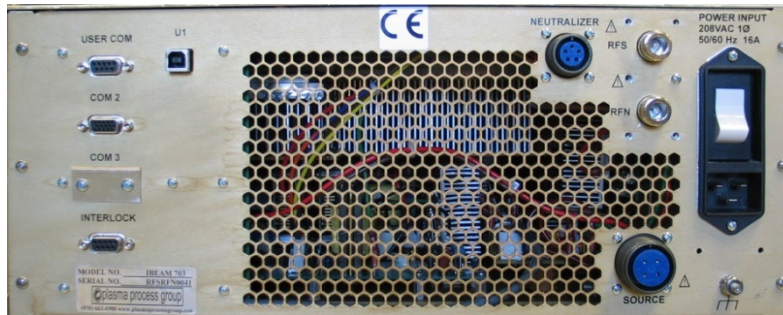
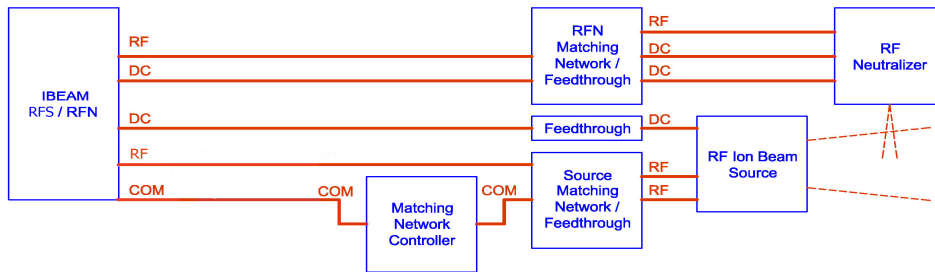
Power Outputs	Six individual supplies to drive a RF ion beam source with an RF neutralizer
Beam Supply	1500 VDC, 600mA
Accelerator Supply	1000 VDC, 50 mA
RF Discharge	500 W Max Built-in RF Generator
RF generator for RFN	100 W
Keeper for RFN	60 V, 300 mA
RFN Emission	120 V, 900 mA
Output Connections	
Source	4 pin industry standard: 97-3102A-18-4S Mil Spec
Neutralizer	5 pin industry standard: 97-3102A-14S-5S Mil Spec
Interface	
Communications	RS-232, DB 9 female
Interlock / Remote Switching	DB 9 female
Matching Network	DB 9 female
Power Input	208 VAC, 50/60 Hz, 16 A, 1 phase
Cooling	Forced air
Chassis	
Mounting	19" rack mount, 4U height
Size (width x height x depth)	19" x 7" x 20"
Weight	483 mm x 178 mm x 508 mm 51 lbs. (23.1 Kg)



Other Available I-BEAM™ 703 Setups Include

IBEAM 703-1-1	Includes adaptor box for legacy systems
IBEAM 703-2-0	1500V / 800mA Beam Supply
IBEAM 703-3-0	2000V / 400mA Beam Supply

RF Ion Beam System Block Diagram



Ordering Information

IBEAM 703-1-0	I-BEAM™ RFS/RFN Power Supply (order cables, sources, & neutralizer separately)
505752A	Cable Kit for I-BEAM Power Supply. Includes 2 RF Coaxial, 1 RFN 5-pin, and 1 Source 4-pin. 18 ft length
504552A	RF Matching Network for RF Ion Beam Sources



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