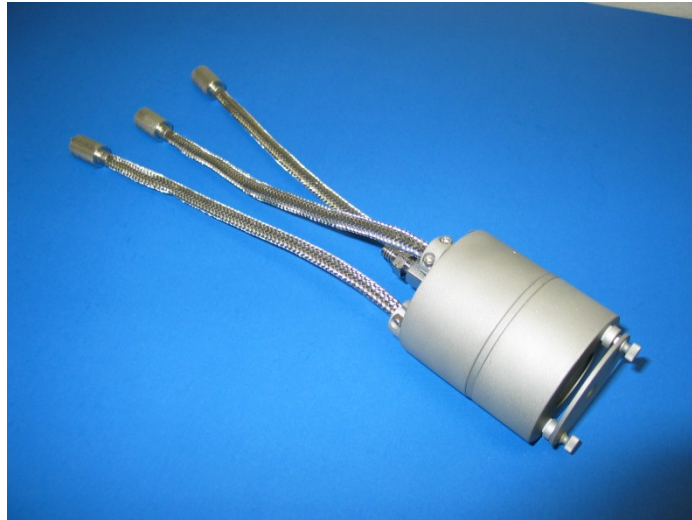




# plasma process group

## RFN (RF Neutralizer)



### Features

- **Complete Assembly, Ready for Installation**
- **Tuned and Tested Prior to Shipment**
- **Compatible with Ion Tech Sources & Power Supplies**
- **Long-term Reliability**

### Applications

- **Operates with RF and DC Ion Beam Sources**
- **Eliminates the Need for Filament-style Neutralizers**
- **Low Maintenance**
- **Lightweight and Easy to Install**

### Description

In an ion beam system, a neutralizer injects electrons into the downstream plasma to neutralize charging effects of the beam. A typical neutralizer is a simple hot filament which erodes over time, an undesirable life-limiting attribute which is accentuated in the presence of reactive gases.

An alternative is the RF Neutralizer which creates electrons by RF discharge. The RFN has no filament and is positioned outside of the beam path, significantly reducing maintenance.

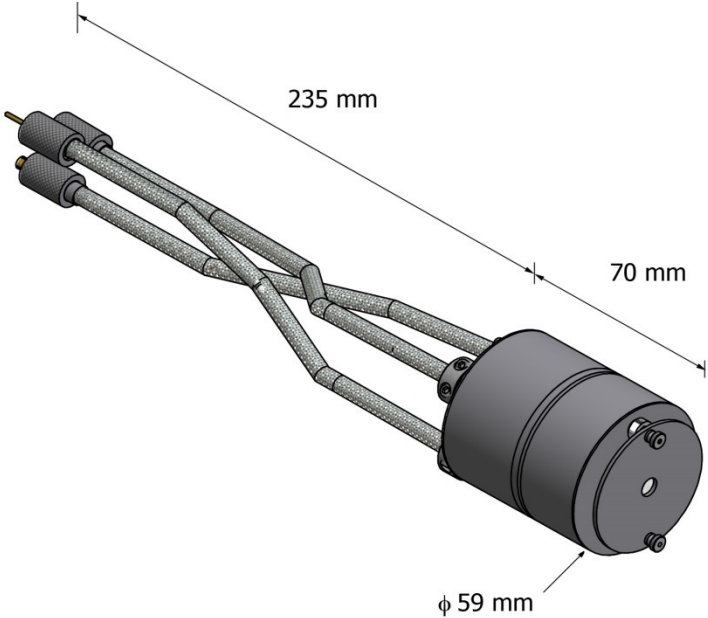
The RFN enables an ion source to be used with reactive gas species that would normally shorten the life of a filament neutralizer.

Flanges and matching network are sold separately. Most common flange sizes and types are available to meet your system requirements. We can also refurbish your RFN for you, cleaning, replacing consumable parts and testing your RFN before we return it to you. This is a great service for those facilities that wish to maximize uptime of their RF systems.

*Whether you're in research or production, Plasma Process Group is committed to providing the best support possible. Help is just 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.*

<b>Specifications</b>		<b>RFN</b>
Model number		RFN (RF Neutralizer)
Part Number		504424B
Emission current		900 mA max
RF Power		100 W max
Mounting configuration	Internal mount, typically attached to a flange or feedthrough.	
Weight		.91 Kg (2 lbs.)
Compatible power supplies	I-BEAM™ 703 RFS/RFN or I-BEAM™ 701 RF/RFN I-BEAM™ 702 RFN Stand-Alone RF-2070 Neutralizer Power Supply	

**Dimensions**

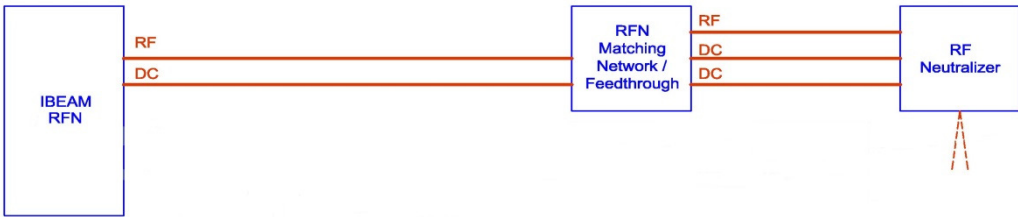


**Ordering Information:** RF Neutralizers are available with a variety of flange mount sizes and types to facilitate installation. Please contact us to help configure your RFN.

**Suggested Accessories:**

- |           |   |
|-----------|---|
| IBEAM 702 | I-BEAM™ 702 RF/RFN Stand Alone RFN Power Supply     |
| 504854A   | 2 3/4" Conflat RFN Flange with RFN Matching Network |
| 504855A   | 6" Conflat RFN Flange with RFN Matching Network     |

**RF Ion Beam System Block Diagram**



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