



# OmniVac

Surface Analysis and Vacuum Technology

## Ion Source

### IS 100



The **IS 100** is an extractor type ion source ideally suited for sample or STM tip sputtering

- noble gas sputtering
- reactive gas sputtering
- for sample cleaning
- direct gas inlet
- adjustable flange-sample distance

[www.omnivac.de](http://www.omnivac.de)

# IS 100 Ion Source

The IS 100 is an extractor type ion source ideally suited for sample sputtering or STM tip cleaning.

The low cost and sturdy design guarantees stable operating conditions over a long period of time.

The Yttrium coated Iridium cathode allows for noble and reactive gas operation.

High emission currents are provided even at low beam energies, with the primary energy range reaching from 0.2 to 5 keV and working pressures in the range of  $10^{-5}$  -  $10^{-6}$  mbar (direct gas inlet).

Spot size and current density depend on the distance between source and sample, where the overall length of the IS 100 can be selected to meet the specific requirements of the used UHV chamber.



<i>Design</i>	Extractor type ion source
<i>Primary energy range</i>	0.2 - 5 keV
<i>Total current</i>	15 - 20 $\mu$ A
<i>Working pressure</i>	$10^{-5}$ - $10^{-6}$ mbar
<i>Spot size (FWHM)</i>	> 4 mm (at > 50 mm working distance and 5 kV)
<i>Mounting flange</i>	DN 35 CF
<i>Insertion depth</i>	variable
<i>Working distance</i>	variable
<i>Bakeable</i>	up to 250°C

► energy range  
0.2 - 5 keV

► medium spot size  
(ca. 4-12 mm)

► reactive gas sputtering

► efficient sample cleaning

## Related products:

**IS 200 Ion Source, 0.2 - 3 kV, XY-deflection, focus unit**  
**IS 300 Ion Source, 0.2 - 5 kV, XY-deflection, focus unit**

## PS-IS 200 Power Supply

<i>Display</i>	Ion energy
<i>Dimension (W x H x D)</i>	19" x 133 mm x 415 mm



**OmniVac**  
Hertelsbrunnenring 30  
D-67657 Kaiserslautern / Germany

Tel +49 (0) 631 3110740  
Fax +49 (0) 631 28056  
sales@omnivac.de