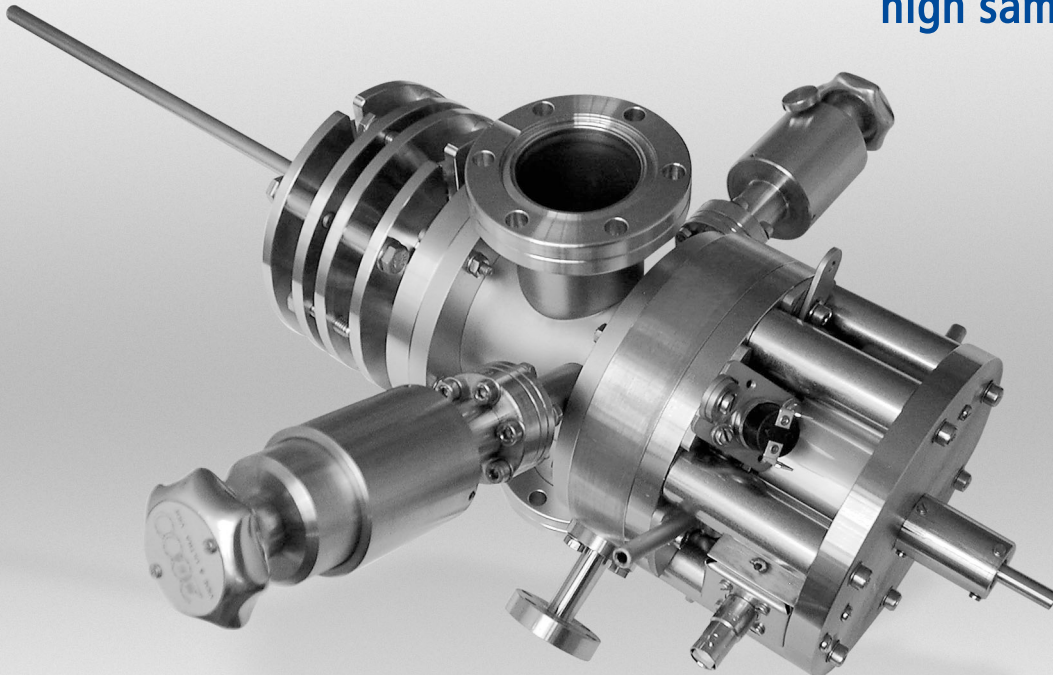


COMPONENTS FOR SURFACE ANALYSIS

# Ultraviolet Source UVS 300

- Duoplasmatron discharge
- High flux  $> 2 \cdot 10^{16}$  Photons / sr · s
- Adjustable He I / He II ratio
- Excellent absolute He II intensity
- Single stage differential pumping
- Special capillary option for  
small spot size  $< 500\mu\text{m}$  and  
high sample current  $> 500\text{nA}$



# Ultraviolet Source UVS 300

The UVS 300 generates a high density plasma by guiding the electrons extracted from a hot cathode filament along the lines of a strongly inhomogeneous magnetic field towards a small discharge region (duo-plasmatron principle). The strong vacuum ultraviolet radiation is extracted from the cathode side by the combination of a metal and quartz capillary.

Easy use is assured by one stage differential pumping and an integrated microvalve for a filament exchange without affecting the vacuum.

## Application:

- Ultraviolet photoelectron spectroscopy (UPS)

## Technical Data:

- High intensity photocurrent > 200nA
- Differential pumping
- Water cooling 0.5bar, 1.5l/min
- Mounting flange DN35CF (2.75" OD)
- Insertion depth 166mm
- Bakeable up to 100°C
- High intensity of atomic and ionic lines, e.g. He II
- Other operational gases and capillaries possible
- Weight 12kg

## Power Supply

### UVS 300-A

- High thermal and electrical stability
- Constant voltage / current mode
- Interlocks: flow sensor, cathode temperature

- 19" (W) x 182mm(H), 8.7kg
- 100/115/200/230V, 600VA, 50-60Hz



## Options

### Special capillary

- Small spot size < 500µm
- High sample current > 500nA

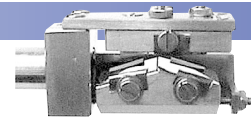
### Monochromator

### Leak valve

### Gas inlet

### Polarizer

- For measurements with linearly polarized VUV light
- Triple mirror construction
- Polarization degree > 90%
- In situ switchable polarized / nonpolarized



### Pumping lines

SPECS GmbH  
Surface Analysis and Computer Technology  
Voltastrasse 5  
13355 Berlin · GERMANY

Tel.: +49 (0)30 467824-0  
Fax: +49 (0)30 4642083  
e-mail: support@specs.de  
http://www.specs.de

Your Local Representative: