

## Features

- 100% UHV construction
- Long-life filament
- Discrete filament housing unit
- Simple user maintenance
- All-refractory materials in hot zone
- Intrinsic water-cooling
- Integral manual or automatic shutter
- PBN, Alumina or BeO crucibles
- 500 to 1300 °C versions available
- Single 2U power unit with PID temperature control
- 5-35cc crucibles
- MBE
- Composite materials
- Doping



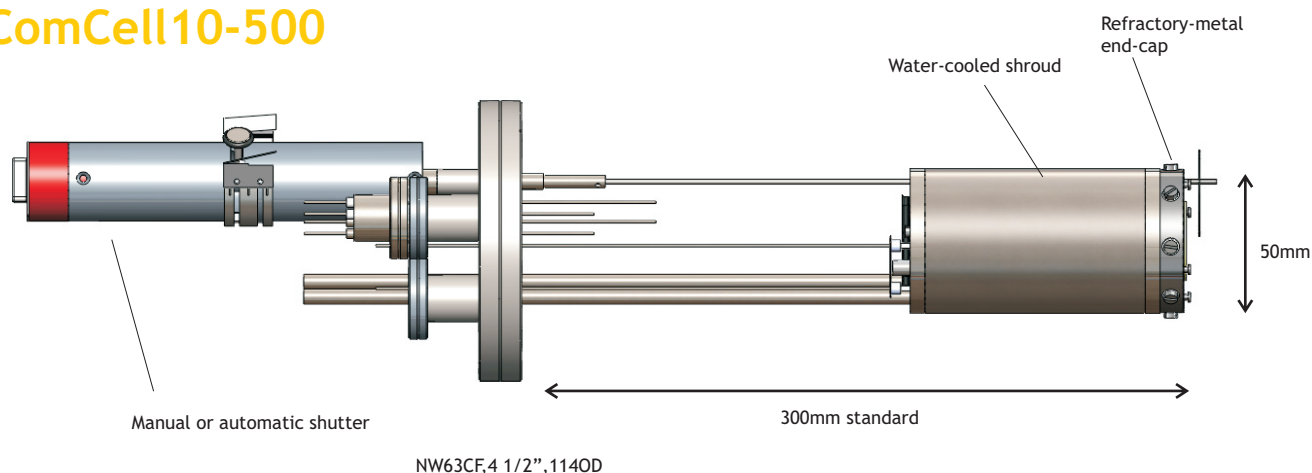
# Specifications

The Mantis Comcell effusion cell series are designed for high- purity, high-precision evaporation of materials in MBE or hybrid UHV applications. The sources are all equipped as standard with a water-cooling shroud which ensures minimal outgassing contamination during operation. All elements in the

hot zone are manufactured from either refractory materials or high-purity pyrolytic boron nitride. The filament housing forms a discrete unit which can be removed and replaced as a sub-assembly, allowing rapid and reliable maintenance by the end-user.

The ComCell series can be supplied in a variety of options with low-temperature and high temperature options available. Users can select between PBN, Al<sub>2</sub>O<sub>3</sub> and BeO crucibles depending on material and maximum operating temperature.

## ComCell10-500



### ComCell10-500

### ComCell10-1300

### ComCell35-1300

	ComCell10-500	ComCell10-1300	ComCell35-1300
Mounting flange	NW63CF	NW63CF	NW63CF
In-vacuum length (standard)	300mm	300mm	300mm
In-vacuum diameter	50mm	50mm	60mm
Max output power	400W	600W	750W
Max operating temperature	600°C	1400°C	1400°C
Max operating temperature (continuous)	500°C	1300°C	1300°C
Crucible capacity	10cc	10cc	35cc
Cooling	Water (0.7 l/min required)	Water (0.7 l/min required)	Water (0.7 l/min required)

### Utilities

Water: minimum flow 0.5 l/min. Clean mains water acceptable.  
Standard cable length: 5m.  
Power supply: single phase, 100-240V, 50/60 Hz.

### Accessories

Integral manual and automatic (servo) shutters.



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