

## Electron Beam Evaporator

EBV 100



evaporation

thin film growth

molecular beam epitaxy

high stability and reliability

uniform deposition

up to 3600 K

www.omnivac.de

## EBV 100 Electron Beam Evaporator

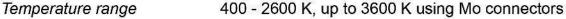
The OmniVac EBV 100 Electron Beam Evaporator is designed for high precision thin film growth and molecular beam epitaxy.

The precisely defined vapor beam allows for a highly uniform deposition on the substrate.

The deposition area is determined by the distance between the source and sample and the choice of an easily exchangeable exit mask.

The PS-EBV 100 power supply is designed to provide highly stable operation conditions, i.e. beam energy and filament current.

An ion flux controller allows for an automated deposition using PID regulation.



Electron energy 0 - 1500 eV

Max. emission current 200 mA

Max. power current 300 W

Filament current 1.8 - 2.2 A, max. 2.5 A

Working distance 70 - 75 mm Diameter 0.5 - 2.3 mm

Cooling system Water flow > 0.5 L/min, max. 6 bar min.190 mm (standard, custom length

available on request

Mounting flange DN 40 CF (OD 35 mm)

▶ uniform deposition

high stability

▶ up to 3600 K

▶ internal water cooling

► flux monitor

## Related products:

EBV 200 Electron Beam Evaporator, 3 kW (DN 63 CF)
EV 300 Electron Beam Evaporator,
3-pocket evaporator (DN 40 CF)

## PS-EBV 100 Power Supply

Beam energy Error < 1 eV, ripple < 0.5 V<sub>pp</sub> Filament current Error 0.1 A, ripple < 0.5 V\_

Filament current Error 0.1 A, ripple < 0.5 V PP 10 nA -100 mA, 8 ranges, 1% accuracy per range

Flux regulation control PID controller

*Dimensions (W x H x D)* 19" x 133 mm x 350 mm

Modes auto (flux controlled), manual (no flux control)



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