HEATABLE WINDOWS
HW

This heatable UHV quartz-window is designed to be used in MBE and other evaporation systems without the need of a shutter or other protections.

During epitaxial growth the temperature of the window can be kept at room temperature, in order not to disturb in-situ measurements.

After growth or intermittently during growth the temperature is ramped to at most 1000 °C to evaporate any condensed material. A water cooling system around the heatable window protects the surrounding.

OPTION: A control unit which contains a PID-controller and a power supply allows a convenient use of the heatable window, manually or by computer control. (See page 32)

Technical Data

Standard :

Type	**HW-40-20**
Flange size	NW 40 CF
Length	90 mm
Diameter visibility	20 mm
Heating system	Tantalum wires with PBN insulators
Thermocouple type	WRe 5%-26% (type C)
Temperature range	RT ...1000°C
Temperature stability	≤ 0.1 K depending on the PID controller
Max. outgas temp	1050° C
Max. power	180 W
Max. current	12 A
Window material	Quartz (Suprasil 2)
Bakeout temperature	250°C
Conditioning	Heated to maximum temperature

Options :

Version wthout water cooling	Max. temperature 650° C

Standard:

Type	**HW-63-40**
Flange size	NW 63 CF
Length	120 mm
Diameter visibility	40 mm
Heating system	Tantalum wires with PBN insulators
Thermocouple type	WRe 5%-26% (type C)
Temperature range	RT ...1000°C
Temperature stability	≤ 0.1 K depending on the PID controller
Max. outgas temp	1050° C
Max. power	490 Watts
Max. current	14 A
Window material	Quartz (Suprasil 2)
Bakeout temperature	250°C
Conditioning	Heated to maximum temperature

Options :

Version without water cooling	Max. temperature 650° C