

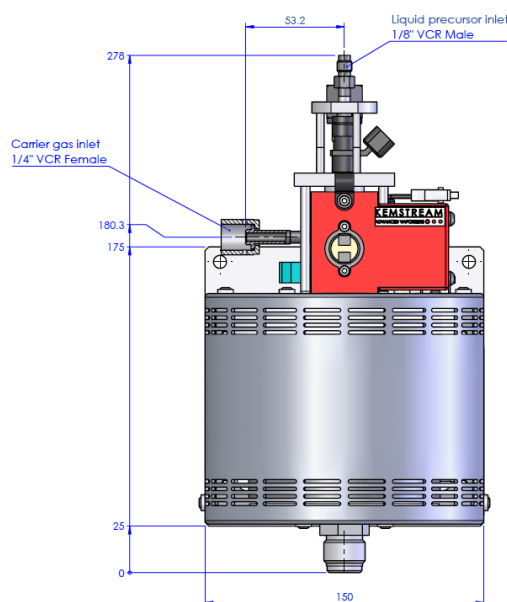
VAPBOX 310



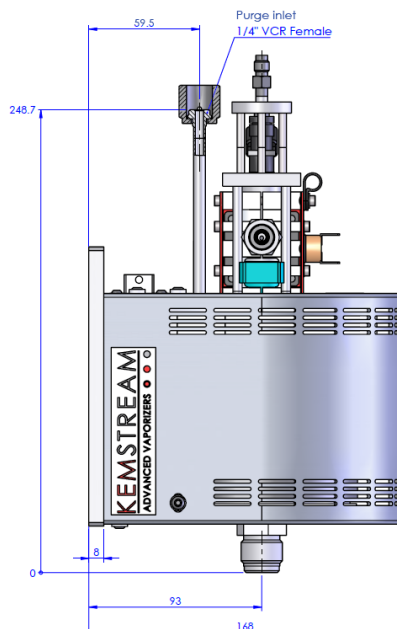
- Vaporizes pure liquid compounds and solid ones dissolved in a carrier liquid (organic solvent) up to 250°C.
- Is able to handle and vaporize most of solid and liquid compounds including low vapor pressure, thermally labile and viscous ones.
- Provides high and unmatched performances based on a pulsed injection of a mixture of liquid and carrier gas. That pulsed injection is performed by a proprietary Injection Head (atomizer) and allows a very fine atomization and thus flash vaporization of the liquid.
- Features an improved internal design with integrated baffle.
- Can also receive two internal stainless steel frits.
- Designed for ALD on large surfaces (batch ALD, ALD in deep trenches, spatial ALD).
- Optional purge port on the top flange.

DIMENSIONS (mm)

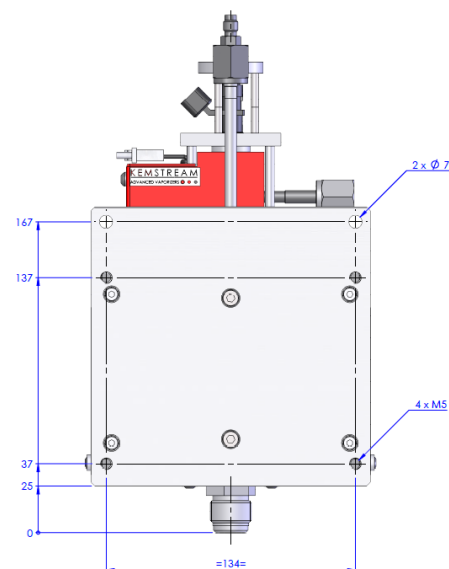
Total weight is about 7.4 kg



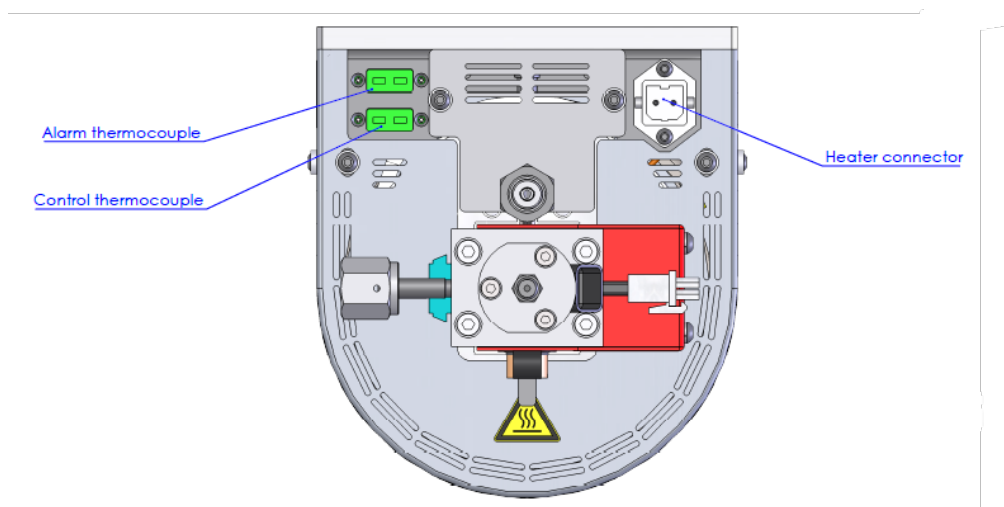
Front view



Side view



Back view



Top view

TECHNICAL SPECIFICATIONS

Injection Head (liquid inlet)

- 1

ICU (Injection Control Unit)

- 24 VDC or 110-230 VAC remote and rackable 19" 2U unit

Heating:

- 1 heating zone, up to 250°C, 400 W
- 2 K type thermocouples: (1 for control, 1 for alarm)

Fittings:

- 1/8" compression type or 1/8" VCR male fitting for liquid inlet
- 1/4" VCR female fitting for carrier gas inlet
- 1/2" VCR male fitting for vapor outlet
- Optional purge inlet on the top flange

Versions (heater):

- 230 VAC version and 115 VAC version

Accessories:

- Liquid flow controlling kit including a Liquid Flow Meter (LFM)
- Liquid panel including a precursor tank and with an optional solvent tank (for rinsing purpose)
- Carrier gas panel including a carrier gas Mass Flow Meter (MFM)
- TCU (Temperature Control Unit): 19" remote and rackable 3U unit

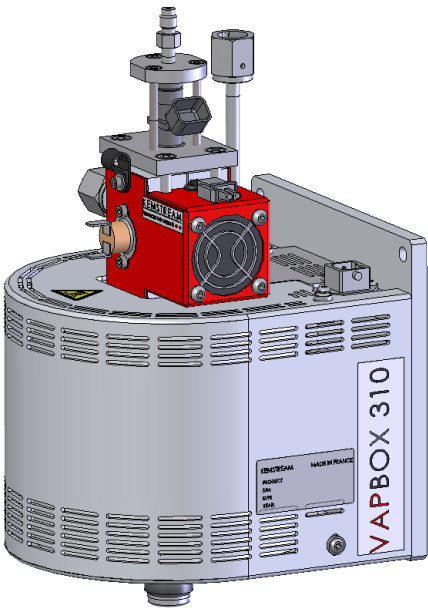
Flows range:

- Typical carrier gas flow range = 120 to 7500 sccm
- Typical liquid flow range = 0.1 to 10 g/min

DETAILS OF VAPBOX 310

Injection head (atomizer) →

Vaporization chamber →



INJECTION HEAD

Ordering information		HB4	-	S2V	F4	H	
Liquid inlet fitting							
S2V	1/8" Swagelok						
M2V	1/8" VCR male						
Carrier gas inlet fitting							
F4	1/4" VCR female (standard)						
M4	1/4" VCR male						
S4	1/4" Swagelok						
T4	1/4" OD tube						
Carrier gas inlet direction							
H	Horizontal (standard)						
V	Vertical						
Cooling option							
	Standard						
C1	Reverse fan flow						
C2	High flow fan /Thermal switch 90°C						

VAPORIZATION CHAMBER

Part number		V31	HB	M8	V	F4	X	X	1A
Voltage (for heating)									
HB	230 VAC								
LB	115 VAC								
Vapor outlet fitting									
M8	1/2" VCR male (standard)								
	Other fittings upon request								
Vaporizer pressure (process P)									
V	From 0 to 1.5 bara								
A	Above 1.5 bara								
Optional supplementary gas port									
F4	1/4" VCR female								
	Other fittings upon request								
Optional internal droplet absorber									
F	Type F absorber								
X	No absorber								
Optional vapor outlet filter									
H	Type H filter								
X	No filter								

