HiCube Neo RGA

Residual gas analysis systems

PFEIFFER VACUUM+FAB SOLUTIONS

Part of the BUSCH GROUP



Compact

Integrated turbomolecular vacuum pump unit and mass spectrometer

Safe

Integrated DigiLine full-range transmitter to monitor the total pressure and protect the filament

Flexible

Portable, extended range of accessories, e.g. different mass ranges, chamber heating, transport box

Accessories, spare parts and options

- Spare electronics
- Spare ion source
- Spare filament
- Spare analyzer
- Spare gauge
- Spare pumps or pump service kits
- Spare inlet valve
- Mass ranges
- Filament material
- Various backing pumps
- Various gauges
- Chamber heating
- Computer with Pfeiffer MassSpec software
- Shut-off valve
- Calibration gas option
- Transport box
- Mobile cart

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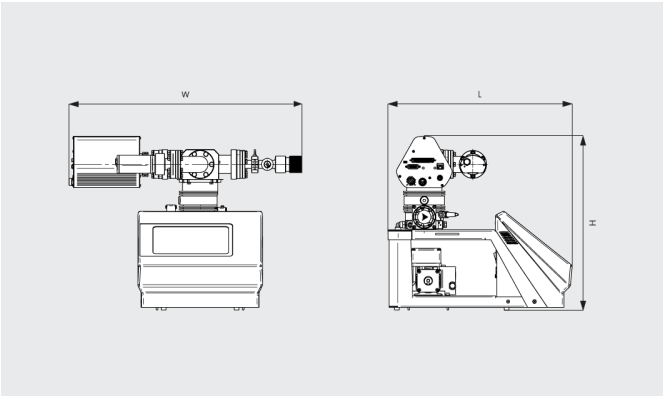
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Dimensional drawing



	HiCube Neo RGA (QMG 250 F1)	HiCube Neo RGA (QMG 250 F2)	HiCube Neo RGA (QMG 250 F3)
Mass range	1 - 100 u	1 - 200 u	1 - 300 u
Detection limit (Faraday)	$4 \cdot 10^{-13}$ hPa (mbar)	$5 \cdot 10^{-13}$ hPa (mbar)	$7 \cdot 10^{-13}$ hPa (mbar)
Ar sensitivity (Faraday)	$5 \cdot 10^{-4}$ A/hPa (mbar)	$4 \cdot 10^{-4}$ A/hPa (mbar)	$3 \cdot 10^{-4}$ A/hPa (mbar)
Max. operating pressure (Faraday)	$5 \cdot 10^{-4}$ hPa (mbar)	$5 \cdot 10^{-4}$ hPa (mbar)	$5 \cdot 10^{-4}$ hPa (mbar)
Rod system	6 mm diameter, 125 mm length	6 mm diameter, 125 mm length	6 mm diameter, 125 mm length
Operating temperature analyzer	200 °C	200 °C	200 °C
Operating temperature electronics	5 - 50 °C	5 - 50 °C	5 - 50 °C
Bake-out temperature	300 °C (electronics removed)	300 °C (electronics removed)	300 °C (electronics removed)
Dimensions (L x W x H)	446 x 583 x 434 mm	446 x 583 x 434 mm	446 x 583 x 434 mm
Connecting flange	DN 16 ISO-KF / DN 40 CF-F*	DN 16 ISO-KF / DN 40 CF-F*	DN 16 ISO-KF / DN 40 CF-F*
Detector	Faraday	Faraday	Faraday
Contribution to neighboring mass	< 10 ppm	< 20 ppm	< 50 ppm
Resolution at 10% peak height	0.5 - 2.5 u	0.5 - 2.5 u	0.5 - 2.5 u
Dwell time	1 ms - 16 s/u	1 ms - 16 s/u	1 ms - 16 s/u
Weight approx.	22 - 27** kg	22 - 27** kg	22 - 27** kg
Supply voltage	100 - 240 VAC (50/60 Hz)	100 - 240 VAC (50/60 Hz)	100 - 240 VAC (50/60 Hz)
Interface	Ethernet	Ethernet	Ethernet

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	HiCube Neo RGA (QMG 250 F1)	HiCube Neo RGA (QMG 250 F2)	HiCube Neo RGA (QMG 250 F3)
Reproducibility of peak ratio	± 0.5 %	± 0.5 %	± 0.5 %
Power consumption	max. 240 W without heating, max. 400 W with heating	max. 240 W without heating, max. 400 W with heating	max. 240 W without heating, max. 400 W with heating

*depending on inlet valve

**depending on options

	HiCube Neo RGA (QMG 250 M1)	HiCube Neo RGA (QMG 250 M2)	HiCube Neo RGA (QMG 250 M3)
Mass range	1 - 100 u	1 - 200 u	1 - 300 u
Detection limit (Faraday/C-SEM)	$4 \cdot 10^{-13}$ / $3 \cdot 10^{-15}$ hPa (mbar)	$5 \cdot 10^{-13}$ / $4 \cdot 10^{-15}$ hPa (mbar)	$7 \cdot 10^{-13}$ / $5 \cdot 10^{-15}$ hPa (mbar)
Ar sensitivity (Faraday)	$5 \cdot 10^{-4}$ A/hPa (mbar)	$4 \cdot 10^{-4}$ A/hPa (mbar)	$3 \cdot 10^{-4}$ A/hPa (mbar)
Max. operating pressure (Faraday/C-SEM)	$5 \cdot 10^{-4}$ / $5 \cdot 10^{-5}$ hPa (mbar)	$5 \cdot 10^{-4}$ / $5 \cdot 10^{-5}$ hPa (mbar)	$5 \cdot 10^{-4}$ / $5 \cdot 10^{-5}$ hPa (mbar)
Rod system	6 mm diameter, 125 mm length	6 mm diameter, 125 mm length	6 mm diameter, 125 mm length
Operating temperature analyzer	200 °C (max. 150 °C when operating with SEM)	200 °C (max. 150 °C when operating with SEM)	200 °C (max. 150 °C when operating with SEM)
Operating temperature electronics	5 - 50 °C	5 - 50 °C	5 - 50 °C
Bake-out temperature	300 °C (electronics removed)	300 °C (electronics removed)	300 °C (electronics removed)
Dimensions (L x W x H)	446 x 583 x 434 mm	446 x 583 x 434 mm	446 x 583 x mm 434
Connecting flange	DN 16 ISO-KF / DN 40 CF-F*	DN 16 ISO-KF / DN 40 CF-F*	DN 16 ISO-KF / DN 40 CF-F*
Detector	C-SEM, Faraday	C-SEM, Faraday	C-SEM, Faraday
Contribution to neighboring mass	< 10 ppm	< 20 ppm	< 50 ppm
Resolution at 10% peak height	0.5 - 2.5 u	0.5 - 2.5 u	0.5 - 2.5 u
Dwell time	1 ms - 16 s/u	1 ms - 16 s/u	1 ms - 16 s/u
Weight approx.	22 - 27** kg	22 - 27** kg	22 - 27** kg
Supply voltage	100 - 240 VAC (50/60 Hz)	100 - 240 VAC (50/60 Hz)	100 - 240 VAC (50/60 Hz)
Interface	Ethernet	Ethernet	Ethernet
Reproducibility of peak ratio	± 0.5 %	± 0.5 %	± 0.5 %
Power consumption	max. 240 W without heating, max. 400 W with heating	max. 240 W without heating, max. 400 W with heating	max. 240 W without heating, max. 400 W with heating

*depending on inlet valve

**depending on options

DO YOU WANT TO KNOW MORE?

Get in touch with us directly!

CONTACT FORM