

# Cleanroom Air Generators for CO<sub>2</sub>-free Laboratory Air

replace high pressure gas cylinders for oxygen, nitrogen or synthetic air



## CO<sub>2</sub>-free air

Parker cleanroom air generators producing a continuous uninterrupted flow of clean air replace expensive gas cylinders with synthetic air.

Parker clean air generators of the K-MT-LAB series come as a compact block with upstream and downstream filters. The generator as such consists of a dual chamber module made of corrosion protected continuously cast aluminium profile. The unit is controlled electrically and connected to the in-house compressed air network. The product gas leaving the generator is CO<sub>2</sub>-free, very clean compressed air.

The generators can be operated with external compressed air in the range of 4 bar to max. 10.5 bar.



## Technical data

Cleanroom air generator K-MT-LAB	K-MT- LAB 1	K-MT- LAB 3	K-MT- LAB 6
Outlet flow rate	1.5 NI/min	20 NI/min	100 NI/min
Regeneration gas volume	10 NI/min	36 NI/min	75 NI/min
Inlet flow rate	11.5 NI/min	56 NI/min	175 NI/min
Inlet temperature	+ 5°C to + 30°C		
CO <sub>2</sub> outlet concentration	< 1 ppm at max. 380 ppm at the inlet		
Residual hydrocarbons	< 0.003 ppm		
Particle separation	1 µm*		
Pressure dew point	≤ -40°C		
Operating pressure	5 bar <sub>ü</sub>		
Initial differential pressure incl. filtration	300 mbar		
Connections	G 1/4	G 1/4	G 3/8
Weight	14 kg	20 kg	54 kg
Height	401 mm	827 mm	1185 mm
Depth	210 mm	210 mm	300 mm
Width	372 mm	429 mm	580 mm

\* to be changed by the customer to 0.01 µ if required (Element change of post filter)



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# Application Hints



Parker generators producing dry, CO<sub>2</sub>-free air operate according to the adsorption principle. Water and CO<sub>2</sub> molecules are removed from the compressed air by way of adsorption.

Downstream desorption ensures the dryer cartridges are cleaned automatically. As the units are nearly maintenance-free, you obtain a continuous flow of dry air, free of particles and CO<sub>2</sub>.

All hydrocarbons except methane will be removed from the application air. This degree of purity is fully sufficient for many (routine) GC or TOC applications where an additional catalytic combustion of the residual methane is not required.

## Special features and benefits

Gas cylinder management no longer required  
No more handling of high pressure cylinders, no more hazards

## Maximum service life of your application spectrometer

Protects delicate optic surfaces and air bearings against moisture

## Constant and highly clean application air

Reduces the signal-to-noise ratio,  
ensures improved unit performance and  
increases the laboratory performance

## Space saving

Compact and modular design

## After market service

We offer service contracts, service kits and warranty extensions

## Unit properties

- Fully regenerative PSA technology, tried and tested in continuous operation
- Compact and lightweight construction
- Integrated upstream and downstream filters
- Stand-alone or wall mount installation
- Easy to install

## Recommended service kits

Model	Contents	Maintenance Interval	Part No.
<b>K-MT-LAB 1 and K-MT-LAB 3</b>	Filter cartridges, condensate drain, silencer, reset module	12 months	SKK1-K3/L1/12
	Filter cartridges, condensate drain, silencer, main valves, seal set, reset module	24 months	SKK1-K3/L1/24
<b>K-MT-LAB 6</b>	Filter cartridges, condensate drain, silencer, reset module	12 months	SKK6/L1/12
	Filter cartridges, condensate drain, silencer, main valves, seal set, reset module	24 months	SKK6/L1/24
<b>All Models</b>	Desiccant pack, 2.0 kg of molecular filter granulate.	36 months	DESPAC2LAB
	Required quantities: K-MT-LAB 1 (x1) K-MT-LAB 3 (x3) K-MT-LAB 6 (x7)		

[www.parker.com/gsf](http://www.parker.com/gsf)



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