

ZEFIRO zero COMBINED

Ago. 2019

CINEL® s.r.l.
Gas Generators Technology



DESIGN AND PRODUCTION
OF LABORATORY
GAS GENERATORS

Application

LC/MS
that need Nitrogen & Air

Technical data

	COMBINED	COMBINED S
NITROGEN FLOW RATE	up to 25 l/min at 99,0% purity	up to 60 l/min at 99,0% purity
DRY AIR FLOW RATE	up to 50 l/min	up to 100 l/min
AIR INLET PRESSURE REQUIRED	8 bar	8 bar
NO INTERNAL COMPRESSOR	Need to be connected to an existing clean and dry compressed air network	Need to be connected to an existing clean and dry compressed air network
EASY AND QUICK MAINTENANCE	Only change filter element once per year	Only change filter element once per year
NOISE	Absent. No moving mechanical parts on the generator	Absent. No moving mechanical parts on the generator
POWER	Not required	Not required
CONNECTIONS	N2: G 1/4 + quick connection for 1/4" pipe AIR: G 1/4 + quick connection for 1/4" pipe	N2: G 1/4 + quick connection for 1/4" pipe AIR: G 1/4 + quick connection for 1/4" pipe
WEIGHT	40 kg	45 kg
DIMENSIONS	40x40x95 cm (WxDxH)	40x40x95 cm (WxDxH)



ZEFIRO zero series
NITROGEN
GENERATORS

The constant and completely
autonomous supply of nitrogen flux (*)

“Design and production
of laboratory
gas generators”



CINEL S.r.l. Gas Generators Technology
Via Andreon, 5
35010 Vigonza (Padova) - Italy
tel. +39 049 725022
fax +39 049 8931881
e-Mail info@cinelsrl.com
VAT IT04866570288

www.cinelsrl.com





ZEFIRO zero LC-MS



ZEFIRO zero DUAL-PURITY



Description

The nitrogen generator ZEFIRO ZERO uses membranes technology. The system produces laboratory pure nitrogen from an existing in house oil free compressed air supply (*). Compressed air is forced to pass through a hollow fibers membrane, with selective permeation of the different components, nitrogen, oxygen, CO₂, water vapor and traces of rare gases (Ar, Co), depending on the rate of diffusion. The rate of diffusion of nitrogen through the membrane is slower than the other components, which thus flow outside of the fiber membrane, leaving nitrogen inside only.

Application

LC/MS

Technical data

FLOW RATE	20, 40, 60, 80, 120 l/min
PURITY	99,0% @ 7 bar
AIR INLET PRESSURE REQUIRED	8 bar
NO INTERNAL COMPRESSOR	Need to be connected to an existing clean and dry compressed air network
EASY AND QUICK MAINTENANCE	Only change filter element once per year
NOISE	Absent. No moving mechanical parts on the generator
POWER	Not required
CONNECTIONS	G 1/4 + quick connection for 10 mm pipe
WEIGHT	35-40 kg
DIMENSIONS	40x40x95 cm (WxDxH)

Technical data

DUAL PURITY	DUAL PURITY S
LC/MS N ₂ : up to 35 or 65 l/min at STP Collision Cell N ₂ : 200 ml/min at STP	LC/MS N ₂ : up to 35 l/min at STP Collision Cell N ₂ : 1100 ml/min at STP
99,0% @ 7 bar LC/MS - 99,999% @ 2 bar Collision Cell	99,0% @ 7 bar LC/MS - 99,999% @ 2 bar Collision Cell
8 bar	8 bar
Need to be connected to an existing clean and dry compressed air network	Need to be connected to an existing clean and dry compressed air network
Only change filter element once per year	Only change filter element once per year
Absent. No moving mechanical parts on the generator	Absent. No moving mechanical parts on the generator
G 1/4 + quick connection for 1/4" LC/MS G 1/4 + 1/8" swagelock for Collision Cell	G 1/4 + quick connection for 1/4" LC/MS G 1/4 + 1/8" swagelock for Collision Cell
Not required	Not required
40 kg	45 kg
40x40x95 cm (WxDxH)	40x40x95 cm (WxDxH)

FLOW RATE
PURITY
AIR INLET PRESSURE REQUIRED
NO INTERNAL COMPRESSOR
EASY AND QUICK MAINTENANCE
NOISE
POWER
CONNECTIONS
WEIGHT
DIMENSIONS