

# CALYPSO DS (Double Step)

## Nitrogen Gas generator for LCMS

Reference : CALYPSO.DS.[Flow rate]/1 (With compressor)



### Description

The CALYPSO DS Nitrogen generator has been specifically designed to meet the gas flow, purity and pressure requirements of LCMS instruments.

The Nitrogen generator uses pressure swing adsorption technology (PSA) combined with a pressure management in two steps to produce pure nitrogen gas with a high flow, high pressure and purity.

The CALYPSO DS is available with integrated oil free air compressor using the **Energy Saving Technology mode (EST)**. It is extremely compact and quiet in operation.

The generator is controlled using the latest in color touch screen technology to display the process in real time, inlet / outlet pressure, N2 Flow and status of the system with remote access for diagnostic control.



UNIQUE AND INTELLIGENT OPERATOR INTERFACE WITH REMOTE ACCESS



### Applications

LC-MS

Sample evaporation

### Benefits & Savings

#### IMPROVE ANALYTICAL INSTRUMENTS PERFORMANCE

Improve analytical instruments performance

#### IMPROVE LABORATORY EFFICIENCY

The relatively high gas volumes required by LCMS instruments make cylinder supply inappropriate for such applications. A constant, uninterrupted gas supply eliminates interruptions of analyses to change cylinders.

#### IMPROVE ECONOMY

Quick return on investment < 1 year. No gas cylinder rental bottles, no price inflation. The 2-stage pressure design allows the two compressors to work at their optimum pressure range which is reducing the stress on the compressors and as result extending the life time of the compressors - which is a considerable saving.

#### IMPROVE SAFETY

Nitrogen produced at low pressure and ambient temperature removes the hazards associated with high pressure cylinders and liquid Dewar's.

### Standard Features

- Intelligent color touch screen to provide simple and user friendly management of all functions of the unit
- Fully regenerative PSA technology in Two Step (DS-PSA)
- High Nitrogen pressure up to 8 bar (116 psi)
- With integral oil free air compressor
- Quiet thanks to the Soundproofed compressor box and anti-vibration features
- Auto start
- Audible alarm display and Visual maintenance indication with history log
- Outlet flow indicator
- Energy Saving Technology (EST) :
  - Switch off the compressor when gas supply is not required
  - Allowing low energy consumption and increasing durability of the compressor
- Remote PC monitoring and diagnostic analysis via USB to interface the unit with customer's PC software (allow to carry out checks and maintenance effectively, only via a remote connection)
- Compact design
- Fit with wheels

N2

MODELS	CALYPSO.DS.20/1	CALYPSO.DS.35/1	CALYPSO.DS.40/1	CALYPSO.DS.55/1
<b>GENERALS INFORMATIONS</b>				
Max Nitrogen Flow rate	20 L/min	35 L/min	40 L/min	55 L/min
Max Nitrogen outlet pressure	8 bar (116 psi)			7 bar (101 psi)
N2 purity	> 99%			
Particles	0.1 µ			
Touch screen	Touch screen (operating parameters, system status, alarms and maintenance)			
Max Relative Humidity	80% RH @ 25°C (77°F)			
Temperature range	From 5 - 25°C (41 - 77°F)			
Noise level @ 1M	< 55 dB (A)			
Dimensions (W x H x D)	47.5 x 66.2 x 79 cm (18.7" x 26" x 31")			
Weight (kg/lbs)	125 / 275			
Electrical supply	220 - 240 V ac / 1 ph / 50 - 60 Hz 110 - 120 V ac / 1 ph / 50 - 60 Hz			
Power consumption	1 820 W			
<b>CONNECTIONS</b>				
Nitrogen outlet	1/4" GF			
<b>COMMUNICATION</b>				
USB/PC Control	In series			

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 — Satisfaction Guaranteed —

The products are guaranteed 24 months\*. Beyond, your investment continues to be supported by our maintenance program **[Gold Service]**. Our world class technical assistance offers Programmed preventive maintenance to ensure optimal performance of your Gas generator F-DGSI and a priority intervention in case of failure.

\*Year 2 of warranty subject to generator being serviced at end of the first year by a F-DGSI-approved agent in accordance with fixed annual maintenance schedule. For full terms and conditions, visit [www.f-dgs.com](http://www.f-dgs.com)

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