

## NITRO18LCMS – N2 GENERATOR FOR LC/MS



# N2

### APPLICATIONS

- ✓ Nebulizing, sheath and drying gas for LC / MS
- ✓ Solvent Evaporator
- ✓ Life science researches

### DESCRIPTION

PEUS-Instruments designed the **NITRO18LCMS** product line of **Nitrogen Generator** to meet the gas flow, purity and pressure requirements of the latest generation of almost LC/MS instruments.

**Functioning Principle** : Partially dried compressed Air is provided by the internal, scroll low noise and oil-free compressor module. Based on the field proven single stage Pressure Swing Adsorption (PSA) technology, Nitrogen is then extracted from AIR by a set of filters filled up with CMS. After the extracting process, N2 is stored in a tank and its pressure is regulated electronically to the set value, between 4 and 7.5 bar.(60 to 110 psig). At the instrument's outlet, N2 is filtered of remaining particulates down to 0.1µm. The NITRO18LCMS line is equipped with a Power Economy function which switches off the compressor and PSA modules when consumption of Nitrogen is reduced or stopped. As option, outflow's O2 content monitoring and alarm.

Models with outflows of **20, 35 and 60 L/min** N2 are available.

Each instrument is equipped with high performance communication interfaces (RS485, Ethernet, WLAN) to create a very flexible gas network with local or central control.

Due to the software being focused on safety, automatic regulation and reliable communications, the **PEUS-Instruments NITRO18LCMS Nitrogen Generators** are easy to install, reliable, safe and pleasant to operate.

### BENEFITS

- ✓ Reduces in operation costs. Return on investment within 18 months. Integrated Power Economy function.
- ✓ N2 available 24/7 at constant purity. No contamination.
- ✓ Independent source of High Purity N2.
- ✓ Integrated oil-free scroll compressor with Air treatment. Can be easily moved around the laboratory.
- ✓ Low functioning noise (< 52dBA)
- ✓ Remote control from PC, I-phone and I-pad.(options)
- ✓ Very safe operation, internal leak-test, automatic shut-down, protection against over-temperature.
- ✓ No handling, No storage, No cylinder rental fee.
- ✓ Internal maintenance free. Long life compressor.





# N2 GENERATOR FOR LC/MS

## SPECIFICATIONS

|                            |   |
|----------------------------|---|
| <b>Models</b>              | <b>NITRO18LCMS-20, NITRO18LCMS-35 and NITRO18LCMS-60</b>  |
| N2 capacity<br>@ 1013/20°C | NITRO18LCMS-20= 20 L/min ; NITRO18LCMS-35= 35 L/min;<br>NITRO18LCMS-60=60 L/min   |
| Output N2 purity           | <ul style="list-style-type: none"><li>▪ &lt; 50 ppm H2O (-50°C DP/-60°F DP)</li><li>▪ &gt; 99% N2</li><li>▪ particulates &lt;0.1µm</li></ul>  |
| O2 monitoring              | O2 content in N2 outflow with alarm (option)  |
| Output Pressure            | From 4 to 7.5 bar, adjustable by software. (60 to 110psig)  |
| Compressed AIR             | Supplied by internal Oil free scroll compressor. Automatic drying. Power Economy function.  |
| Manual control             | By ON/OFF power switch, outlet pressure by manometer  |
| Remote control             | <ul style="list-style-type: none"><li>■ RS485 (Mod-Bus)</li><li>■ Trough Ethernet 10/100 network (option)</li><li>■ Trough WLAN network, with PC, I-Phone, I-Pad (option)</li><li>■ Log book download by USB.</li></ul> |
| Outlet fitting             | Stainless steel 1/4" compression  |
| Noise level                | < 52 dBA @ 1m   |
| Power supply               | 100 to 120 VAC 50-60 Hz or 220 to 240VAC, 50 to 60 Hz   |
| Power consumption          | NITRO18LCMS-20: max. 1800W; NITRO18LCMS-35: max. 2300W;<br>NITRO18LCMS-60: max. 2800W   |
| Dimensions                 | W=55cm/21.6ins, H=120cm/47.5ins, D=80cm/31.5ins   |
| Weight (net)               | NITRO18LCMS-18: 165Kg (370lbs), NITRO18LCMS-35: 200Kg (440lbs),<br>NITRO18LCMS-60: 240Kg (530lbs),  |
| Certification              | CE  |

## ORDERING NUMBERS

| <b>Models</b>      | <b>Article #</b> |
|--------------------|------------------|
| NITRO18LCMS-20-230 | 755212           |
| NITRO18LCMS-35-230 | 755215           |
| NITRO18LCMS-20-115 | 755232           |
| NITRO18LCMS-35-115 | 755235           |
| NITRO18LCMS-60-230 | 755252           |
| NITRO18LCMS-60-115 | 755255           |

| <b>Options</b>            | <b>Article #</b> |
|---------------------------|------------------|
| WLAN Interface option     | 755281           |
| Ethernet interface option | 755282           |
| O2 monitoring +Alarm      | 755285           |

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