

Nitrogen Generator Comparison

Organomation NITRO-GEN vs. Parker NitroVap



| | Organomation NITRO-GEN | Parker NitroVap-1LV and NitroVap-2LV |
|---|--|--|
| List Price | \$5-7k | \$14-19k |
| Flow Rate | Up to 20 L/min | NitroVap-1LV: Up to 140 L/min NitroVap-2LV: Up to 287 L/min |
| Flow rate at 95% purity and 7 bar air supply | 19 L/min | NitroVap-1LV: 62 L/min NitroVap-2LV: 124 L/min |
| Purity | 95-99% | 90-99% |
| Max Output Pressure | 0-100 psi / 0-6.9 bar | 0-15 psi / 0-1 bar |
| Compressor Included? | No | No |
| Dimensions | 9.5 x 8 x 19.5 in. (L x W x H) 13.25 lbs. | 14.1 x 10.63 x 16.5 in (L x W x H) 53 lbs. |
| Warranty | 1 year | 1 year |
| Digital Display? | No | No |
| Touch Screen? | No | No |
| Noise Level | Negligible (<40 dBA) | Negligible |

The NITRO-GEN and NitroVap are both highly popular nitrogen generators for sample preparation applications. Now that you've compared their main specifications, let's get into when each generator would be preferred.

Organomation NITRO-GEN

The NITRO-GEN generator was designed to be paired with Organomation nitrogen evaporation equipment, and is recommended for use with all Organomation evaporators up to 48 sample positions. The NITRO-GEN is also a great solution for use with Thermo Fisher's Reacti-Vap evaporators as they require a fairly low nitrogen flow. The generator's purity is dependent on both inlet pressure and output flow rate required, however the 95-99% purity range allows it to be suitable for most sample preparation applications.

Parker NitroVap

The NitroVap generator is suitable for supplying gas to Labconco RapidVap systems, which require a high flow rate but low pressure. Similar to the NITRO-GEN, the NitroVap's purity level is dependent on both inlet pressure and output flow rate required. To reach the maximum flow rates (140 L/min for NitroVap-1LV and 287 L/min for NitroVap-2LV), purity will be closer to 90%, which is lower than the minimum recommendation of 95% purity for most sample preparation applications.

Considerations

It's important to consider all factors such as purity, flow, and pressure requirements of your evaporator before selecting a generator. Below is a table showing the inlet flow and pressure levels required for common nitrogen evaporators.

| Model | Inlet Pressure | Minimum Flow Rate |
|---|----------------|-------------------|
| Organomation 24 Position N-EVAP | 20-30 psi | 8 L/min |
| Organomation 48 Position MULTIVAP | 30-110 psi | 16 L/min |
| Organomation 100 Position MULTIVAP | 30-110 psi | 33 L/min |
| Thermo Fisher Reacti-Vap 27 Port | Up to 2 psi | 9 L/min |
| Labconco RapidVap N2 | 5-20 psi | 17 L/min |
| Labconco RapidVap N2/48 | 5-20 psi | 100 L/min |
| Labconco RapidVap Vertex | Up to 50 psi | 185 L/min |
| Biotage TurboVap II and LV (24 positions) | 58-130 psi | 120 L/min |
| Biotage TurboVap II and LV (48 positions) | 58-130 psi | 160 L/min |