



The V10-W-NS/N 10-Litre Oxygen Concentrator with Nebulization (VM-OXYCV10WNS/N) is a high-flow PSA molecular sieve oxygen concentrator delivering 0.5–10 L/min at $93 \pm 3\%$ oxygen concentration, with an integrated oxygen-driven nebulization function for concurrent bronchodilator or mucolytic therapy. It features an LCD display and a full alarm system covering power failure, low oxygen purity, and overheating, and is CE certified. The VM-OXYCV10WNS/N is suited to ICUs, high-care

units, emergency departments, and pulmonology units requiring combined high-flow oxygen therapy and nebulized medication delivery from a single unit.

PSA Technology and 10-Litre High-Flow Oxygen Output

The V10-W-NS/N 10-Litre Oxygen Concentrator with Nebulization (VM-OXYCV10WNS/N) uses Pressure Swing Adsorption (PSA) molecular sieve technology to extract and concentrate oxygen directly from ambient room air, delivering a continuous adjustable flow of 0.5 to 10 L/min at a purity of $93\pm3\%$ — the therapeutic concentration range recognised for clinical oxygen therapy. The 10-litre maximum flow rate accommodates high-flow delivery modes including non-rebreather masks and Venturi mask therapy, supporting higher-acuity patients with significant oxygen demand. PSA technology eliminates dependence on pressurised oxygen cylinders, providing continuous oxygen supply as long as mains power is available and reducing the logistical burden of cylinder management in clinical environments.

Integrated Oxygen-Driven Nebulization for Concurrent Respiratory Therapy

The defining feature of the VM-OXYCV10WNS/N relative to the standard non-nebulizing model is its integrated nebulization function, which uses the concentrator's own high-purity oxygen output as the driving gas for medication atomization. This means bronchodilator, mucolytic, or other inhaled medications are delivered on a medical-grade oxygen carrier rather than compressed air — an important clinical consideration in patients with severe hypoxaemia, where air-driven nebulization could reduce the effective fraction of inspired oxygen (FiO_2) delivered to the patient. The ability to provide high-flow oxygen therapy and nebulized medication concurrently from a single device reduces equipment complexity in the management of acute COPD exacerbations, severe asthma attacks, and other acute lower respiratory conditions requiring simultaneous oxygen supplementation and inhaled pharmacotherapy.

Alarm System, Display, Power, and Clinical Applications

The VM-OXYCV10WNS/N includes an LCD display for flow and operational status monitoring, and a

full alarm system covering power failure, low oxygen purity, and overheating — providing the continuous safety oversight required in institutional clinical environments where uninterrupted therapeutic oxygen delivery is critical. The unit operates on mains AC power and is CE certified. Available in South Africa from Vital Medical, the V10-W-NS/N is suited to ICUs, high-care units, emergency departments, pulmonology units, and respiratory therapy centres where high-flow oxygen and concurrent nebulized medication delivery are routinely required in the management of acute and sub-acute respiratory patients.

Technical Specifications

Specification	Value
Model	V10-W-NS/N
VM SKU	VM-OXYCV10WNS/N
Type	10-litre high-flow oxygen concentrator with nebulization
Technology	PSA (Pressure Swing Adsorption) molecular sieve
Flow rate	0.5–10 L/min
Oxygen concentration	93±3%
Nebulization	Integrated, oxygen-driven
Display	LCD
Alarms	Power failure; low purity; overheat
Power	Mains AC
Certification	CE

SKU: VM-OXYCV10WNS/N