UCvenT

A locally designed and produced BiPAP non-invasive ventilator

Sensed ventilation with adjustable breath sensitivity for optimal patient comfort

Automatic mask leak detection and alarm

Multi-day battery power

Intuitive and fool proof graphic user interface

Advanced breath detection algorithm

Live pressure, flowrate, and volume waveforms

A BiPAP ventilator oscillates between a higher inspiratory pressure and lower expiratory pressure to make sure it provides sufficient support when the patient inhales but is still comfortable for the patient to exhale.

The inspiratory and expiratory phases are triggered by the patient attempting to inhale or exhale. The sensitivity of both triggers is adjustable to ensure sufficient support is provided to the patient and that the patient can be weaned off the ventilator.

The flow rate of the air going to the patient, the pressure delivered to the patient, and the volume of air delivered to the patient is displayed in waveforms on the user interface. This helps clinicians understand the patient's condition, informing any subsequent treatment decisions.

UCT MedTech

UCvenT was developed by a team from the UCT Medical Devices lab in the Division of Biomedical Engineering, Department of Human Biology, Faculty of Health Sciences of University of Cape Town in response to the merSETA Virovent Innovation Challenge.

For more information visit: www.MediVentors.com or www.bme.uct.ac.za or contact us at medicaldevices@uct.ac.za or UCT's Research Contracts & Innovation at ResearchContractsandInnovation@uct.ac.za