Low flow anaesthesia is common practice now that anaesthesia machines have ventilators that are able to accurately provide fresh gas flow at minimal levels. It’s cost-effective for the hospital and beneficial to the patient. However, gas volume deficiency remains a concern. The Perseus® A500 incorporates two assistants for safe administration of low and minimal flow anaesthesia – the Econometer and the Low Flow Wizard.

Low flow anaesthesia has benefits for the patient, the hospital and the environment. The patient is delivered gases that have an improved temperature and humidity, the hospital saves money due to reduced costs on anaesthesia gases and the environment benefits from a decrease in greenhouse gas emissions.

However, low and minimal flow anaesthesia are not without problems, such as the volume of fresh gas flow falling below the patient uptake and a hypoxic situation occurring.

The Perseus A500 has two functional tools that allow the anaesthetist to view fresh gas flow in relation to fresh gas consumption, in real time – the Econometer and the Low Flow Wizard.

**ECONOMETER – FEATURES & BENEFITS**
Perseus A500 monitors the filling level of the manual breathing bag and displays the qualitative fresh-gas supply in a bar graph of the Econometer.

When in the yellow area there is a surplus of supply and the possibility to save fresh gas and therefore, anaesthetic agents.

The green area is an indicator that the manual breathing bag on the Perseus A500 is sufficiently full, there is reserve capacity available and no action is necessary.

The red area means there is insufficient fresh-gas supply and the user needs to fill the manual breathing bag. The Econometer trend graph provides an indicator for the qualitative fresh-gas supply during the last 30 minutes.
LOW FLOW WIZARD

The Low Flow Wizard compares the calculated fresh gas consumption (patient uptake + circuit leakage + volume of CO₂ absorption by soda lime) with the current total flow in an easy to interpret graph.

Each of these tools are useful in low flow anaesthesia as well as assisting to provide economical anaesthetic gas delivery at the sametime as preventing hypoxic situations.