

Your universal solution for respiratory humidification at home



F&P my820 System

The F&P my820 System provides heated humidification for adult and pediatric home-based patients receiving invasive or noninvasive ventilation (NIV) therapies.

There are many benefits to using heated humidification in the home which includes maintaining secretion clearance in patients with a bypassed airway as well as supporting comfort and tolerance to NIV.



Features and benefits

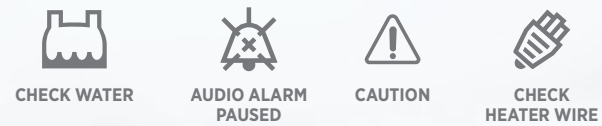
1 **Heated breathing tubes to minimize condensation**
The inspiratory breathing tubes in the F&P my820 System are heated and can be used by a single patient for up to 14 days.

2 **No separate probes or adapters**
The built-in Heater-wire Adapter features an ambient temperature sensor which provides environmental feedback to the humidifier base to ensure the appropriate humidity levels are delivered to the patient.

3 **500 mL chamber capacity**
The MR325 manual-fill chamber can be used on a single patient for up to 14 days.

4 **Four humidity settings**
Four user-selectable temperature and humidity settings support invasive, non-invasive and non-invasive applications for adult and pediatric patients.

5 **Simple alarms**



The F&P my820 System has an intuitive alarm system, which includes the ability to detect when the chamber is out of water.



An overview of a healthy airway

The respiratory system is a highly balanced mechanism reliant on humidity.¹

When we breathe in, air travels down the respiratory tract drawing heat and moisture from mucus in the airway. In a healthy airway, the air reaches a temperature of 37 °C and is saturated with 44 mg/L of water vapor when it arrives at the cartilage at the bottom of the trachea, known as the carina.^{2,3} The airway mucosa needs to retain a balance of heat and moisture to maintain a fully functioning mucociliary transport system. This system traps contaminants in mucus and moves them up and out of the airway using tiny hair-like structures called cilia. This process plays an important role in efficient gas exchange by maintaining clear and open airways with effective mucus clearance¹ while reducing the risk of airway blockages and compromised lung function.¹

Insufficient respiratory humidification can result in diminished cilia activity, a decrease in cilia beat frequency, and may also result in permanent cellular damage.^{1,4}



Heated humidification assists secretion clearance

Bypassing the upper airway, such as with a tracheostomy tube, impedes the airway's humidifying surfaces and filtering mechanisms while compromising the body's protective cough, gag and sneeze reflexes.¹

When mucociliary transport is inadequate, mucus can become a risk factor rather than a defence mechanism. Therefore, humidification and as-needed suctioning are the foundations of secretion management in mechanically ventilated patients.⁵

Failure to heat and humidify inspired gases for patients with bypassed airways can increase the risk of complications such as drying of the airway, airway obstruction, bronchoconstriction, and increased risk of artificial airway tube occlusion.⁴

Continuous airway inflammation, and the retention of mucus are also seen in patients with chronic respiratory diseases. These patients commonly have clinical care provided in a homecare setting where the use of humidification can improve secretion clearance.^{6,7}

It is widely accepted and mandated by clinical guidelines that inspired gases be heated and humidified for any patient receiving invasive ventilatory support.⁸

Heated humidification can increase comfort and tolerance to NIV

Factors such as gas leaks, high flow rates and unidirectional flows which can occur during delivery of noninvasive ventilation can dry the mucosa found in the nose and mouth,⁹⁻¹¹ disrupting the mucociliary transport system.

Upper airway dryness, and in turn discomfort, is often reported when respiratory gases do not contain adequate levels of heat and humidity during noninvasive respiratory support. Discomfort can impact a patient's ability to comply with the required therapy, which may affect patient outcomes.

Heated humidification provides warmth and moisture to inspired gases, reducing the burden on the airway mucosa. Heated humidification may make NIV therapy more comfortable and improve patient tolerance.⁸



F&P my820 System



Product code	Description
my820AXX*	F&P my820 Humidifier Base – 230 V
my820JXX*	F&P my820 Humidifier Base – 115 V

Product code	Description	Components	Pack size	Duration of use
820A10**	F&P 820 Circuit Heated Single Limb 22 mm		Box of 10 Circuit Kits	Up to 14 days
820A21**	F&P 820 Circuit Heated Inspiratory Dual Limb 22 mm		Box of 10 Circuit Kits	Up to 14 days
MR325	F&P 820 Manual Fill Chamber		Box of 10 Chambers	Up to 14 days

* XX represents the country code
 ** Suitable for patients > 5 kg and V_T > 50 mL



References

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