Taking neonatal noninvasive ventilation to the next level

Infant Flow® SiPAP System

- Clinically proven technology to target lung protection
- BiPhasic and nCPAP modes
- Intuitive operation
- Integrated safety alarms
- Integrated patient monitoring
- Apnea and low breath rate detection

CareFusion

Advancements in noninvasive therapy

The Infant Flow SiPAP System is clinically proven[1] in the successful treatment of thousands of patients worldwide. The Infant Flow SiPAP System, combined with the patented generator technology designed specifically for infants, provides a complete solution for noninvasive ventilatory support.

The Infant Flow SiPAP System offers a comprehensive selection of modalities to provide noninvasive ventilatory support to your neonatal patient. These modalities present the clinician with treatment options to protect the neonate's fragile lungs.

Clinically proven technology

- Reduced ventilator days and extubation failures[2]
- Improved oxygenation and ventilation in BiPhasic mode[2]
- Improved treatment of apnea of prematurity[3]
- Provides maximum pressure stability at the lowest work of breathing[4]

Advanced noninvasive treatment options

- Choice of CPAP, BiPhasic or BiPhasic trigger (tr)*
- Use of grasby capsule for apnea detection and patient synchronization in BiPhasic tr*
- Apnea and low breath rate detection, and patient synchronization in BiPhasic tr*

Safe and versatile

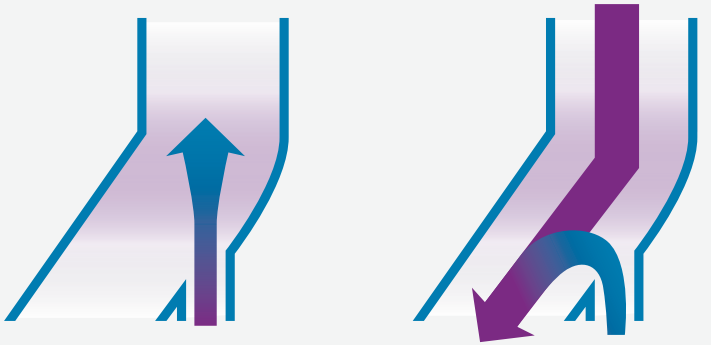
- Up to two hours of battery back up
- Simple Touch™ operation facilitates ease of use
- Fully integrated patient monitoring for easy patient assessment
- Fully integrated alarm systems for patient safety

*Not available in the United States

Protecting fragile lungs

nCPAP

Nasal CPAP (nCPAP) is a constant, stable, single level of positive pressure to the infant's airways; facilitating the restoration of functional residual capacity and the correction of hypoxemia. nCPAP is an established method for providing noninvasive respiratory support to a spontaneously breathing infant via a nasal mask or nasal prongs.



Inspiratory flow

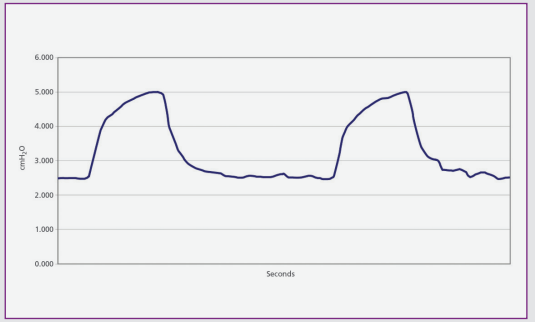
The flow provided by the Infant Flow SiPAP System is accelerated in the twin injector nozzles of the Infant Flow Generator. When the patient makes a spontaneous inspiratory effort, the Infant Flow Generator converts the kinetic energy of the flow to pressure, thereby reducing the work of breathing for the patient and maximizing pressure stability at the patient interface.

Expiratory flow

When the infant exhales, there is a decrease in the forward velocity of the air flow. This allows for the "flip" of gas flow from the nasal prongs to the expiratory tube. The residual gas pressure is provided by the continuous gas flow, which enables a stable CPAP pressure delivery throughout the respiratory cycle. When expiratory effort stops, the flow instantly flips back to the inspiratory position.

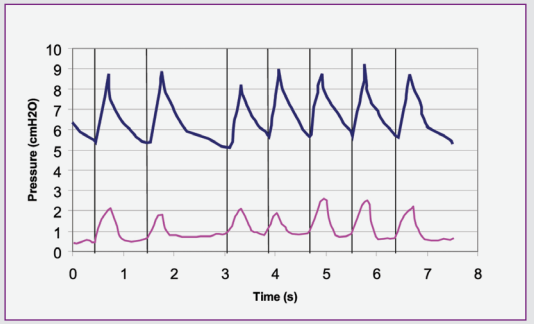
BiPhasic mode

BiPhasic mode is a timed pressure rise above baseline CPAP. Small incremental pressure increases of 2-3 cmH_2O augment functional residual capacity and can offload respiratory work of breathing. BiPhasic mode has been shown to improve oxygenation and ventilation[2] when compared to CPAP.

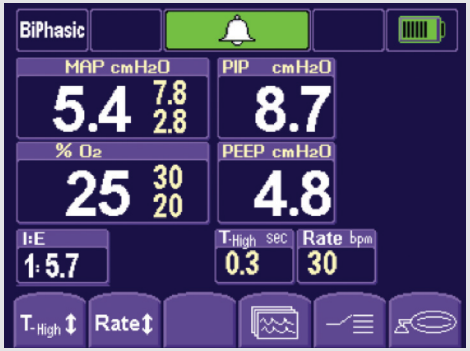


BiPhasic trigger (tr)*

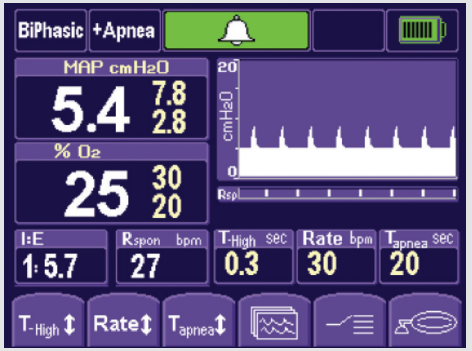
BiPhasic tr is a noninvasive synchronized nasal intermittent positive pressure ventilatory (SNIPPV) support modality that allows clinicians to provide respiratory support without the need for an endotracheal tube. SNIPPV decreases ventilator days by giving the clinician the ability to potentially prevent intubation or the option to extubate early, therefore decreasing the risks associated with intubation.



Advanced monitoring



Monitoring screen



Graphical waveform screen

*Not available in the United States

References

1 Migliori C, Motta M, Angeli A, Chirico G. Nasal Bilevel vs Continuous Positive Airway Pressure in Preterm Infants. *Pediatric Pulmonology*. 2005; 40:426-430.

2 Lista G, Castoldi F, Fontana P, Daniele I, Cavigioli F Rossi S. Mancuso D, Reali R. Nasal continuous positive airway pressure (CPAP) versus bi-level nasal CPAP in preterm babies with respiratory distress syndrome: a randomized control trial. *Arch Dis Child Fetal Neonatal Ed*. 2010 Mar; 95(2)F85-9.

3 Pantalitschka T, Sievers J, Urschitz MS, Herberts T, Reher C, Poets C. Randomised crossover trial of four nasal respiratory support systems for apnoea of prematurity in very low birthweight infants. *Arch Dis Child Fetal Neonatal Ed*. 2009 Jul; 94(4):F245-8.

4 Aghai ZH, Saslow JG, Nakhla T, Milcarek B, Hart J, Lawrysh-Plunkett R, Stahl G, Habib RH, Pvon KH. Synchronized nasal intermittent positive pressure ventilation (SNIPPV) decreases work of breathing (WOB) in premature infants with respiratory distress syndrome (RDS) compared to nasal continuous positive airway pressure (NCPAP). *Pediatr Pulmonol* 2006 Sept; 41(9):875-81.

CareFusion
22745 Savi Ranch Parkway
Yorba Linda, CA 92887

800.231.2466 toll-free
714.283.2228 tel
714.283.8493 fax

CareFusion Germany 234 GmbH
Leibnizstrasse 7
97204 Hoechberg
Germany

+49 931 4972-0 tel
+49 931 4972-423 fax

CE 0086

CareFusion
Yorba Linda, CA

carefusion.com

CareFusion

L2834-101 Rev. B