



# The Giraffe Family

Helping to send babies home healthy



# Every Step of the Way

From delivery to discharge, the Giraffe Family provides continuity across the product platform which makes it easier for the user to learn and use multiple products, and reduces staff training time.

## Streamlined workflow

Because every patient is different, the Giraffe Family enables a **personalized approach to care** helping to closely monitor patient progress. The enhanced user interface offers a more intuitive and efficient interaction with the equipment while the alarm management minimizes alarm fatigue so clinicians remain focused on patient care.



Away screen: large numerics to get quick update on care

## The care station enabler One Baby. One Bed.

When combined with the Giraffe Shuttle, Giraffe beds' convert into a mobile NICU care station providing continuity of care, uninterrupted warmth for the smallest patients and an efficient workflow for caregivers during intra-hospital transport.



The Giraffe Family has **connectivity capabilities** which enable communication to electronic healthcare records and hospital information systems; it is also equipped for future updates and upgrades.

## Infection control

With advanced features and a hands-free alarm silence, the Giraffe Family is designed not to promote bacterial or fungal growth.



Hands-free alarm

## Promoting healthy growth, development and Family Centered Care

The innovative Giraffe Family delivers exceptional thermoregulation and creates a protected environment for the optimal deployment of neurodevelopmental care by reducing unnecessary distractions and disruptions from touch, light and sound, while supporting family centered care to accelerate parental-baby bonding.



Full 360° rotation pressure-diffusing mattress.



Family Centered Care

## Peace of mind and reduced total cost of ownership (TCO)

Leveraging the Giraffe common platform, GE supports your clinical and technical teams over the long run with backward compatibility and few upgradeable features so your fleet remains up-to date. Moreover, with the Giraffe Family you benefit from a tailored service offering maximum operational safety.

# A Clinical Commitment

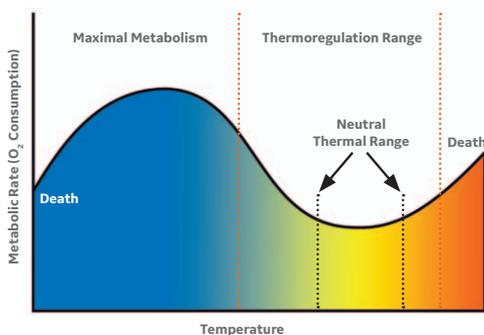
The management of premature infants has evolved over the past three decades to the point where infants now born as early as 22 weeks' gestation have a chance of survival.

## Neuro-developmental Care approach

These tiny patients are at high risk of a variety of developmental problems including motor impairments, cognitive deficits, poor achievement, and behavioral disorders. For GE, promoting neuro-developmental care involves supporting the behavioral organization for each individual infant, enhancing physiological stability, protecting sleep rhythms, and promoting growth and maturation. These interventions include handling and positioning measures, reducing noxious environmental stimuli, and cue-based care. Educating and involving parents, acknowledging that they are the most important people in the infant's life and are critical to the infant's emotional, social and physical wellbeing, is a crucial part of Family Centered Care.

## Thermoregulation

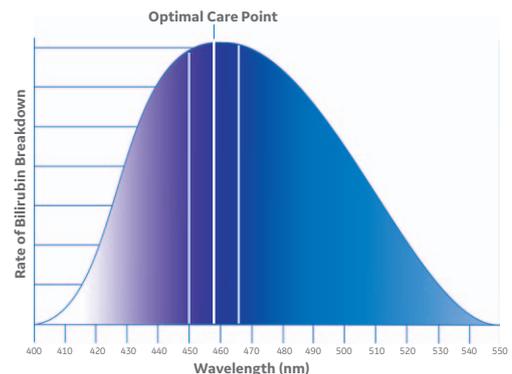
In premature infants, temperature regulation by the central nervous system control is not fully developed. The brain is unable to regulate the metabolism in order to adjust heat production in response to environmental temperature changes<sup>1</sup>. Therefore, when environmental temperature changes occur, the premature infant is unable to maintain thermal stability.



Cold stress and hyperthermia may have serious consequences for all newborns. In small-gestational-age and preterm infants (<2500 g) these consequences may be devastating and may increase both morbidity and mortality rates.<sup>2</sup> Therefore it is extremely important that the micro-environment<sup>3</sup> is able to maintain a Neutral Environmental Temperature (NTE) at which: oxygen consumption and metabolic rate are at a minimum, no additional calories are used for heat production and there is no heat loss.

## Jaundice treatment

Elevated bilirubin levels can be toxic to the infant's central nervous system. 60% of all newborns become clinically jaundiced (up to 80% of preterms). It is the number one reason for hospital readmissions during the first week of life. The primary purpose for treating hyperbilirubinemia with phototherapy is to avoid the development of kernicterus, a condition with devastating long-term neurologic sequelae. Advances in technology offer the clinician choices about light intensity and delivery methods. There are couple of factors which influence the performance of phototherapy: the wavelength of light (nm), the irradiance level or intensity, the body surface area (cm<sup>2</sup>), the duration of phototherapy exposure and distance of the light to the patient.



## Resuscitation

When it comes to infant resuscitation, time is as precious as your patient. Accurate assessment and rapid responses are necessary to help achieve positive outcomes in compliance with the latest neonatal resuscitation guidelines. Immediate access to everything you need right where you need it is essential to quickly and safely delivering neonatal resuscitation therapy.



# Giraffe OmniBed Carestation

Healthy Growth and Development is a Journey

The Giraffe OmniBed Carestation is a full-featured incubator and radiant warmer in one, making its patient micro-environment very special. It was designed to bring babies one step closer to caregivers' expertise and their parents' embrace, and to going home healthy.



# The Best of Both Worlds

- Giraffe OmniBed Carestation allows thermal and physiological stability by delivering a 0.49°C temperature higher than conventional incubators<sup>4</sup> thanks to:

- double-wall design**

- cascade heating algorithm** minimizing temperature swings

- Comfort Zone<sup>5</sup>** coach to set the NTE

- active air boost**

Using Giraffe OmniBed appears to deliver “improvements of at least 15% in clinical outcomes such as body temperature, growth velocity, ventilator use, chronic lung disease, weight stabilization, and electrolyte balance.”<sup>6</sup>



Comfort Zone



Active Air Boost

- A versatile bed:** Its ability to smartly convert from a close incubator to an open warmer system offers the major advantage of an **unrestricted patient access** while helping to reduce the risk of infant stress as a result of bed transitions.<sup>73</sup> The Giraffe OmniBed Carestation delivers appropriate thermoregulation needed during most clinical procedures from resuscitation to the surgery or any other NICU procedures such as intubation.
- Safe intra-hospital transports:** From the delivery room to the NICU and beyond, the combination of the Giraffe OmniBed Carestation and the Giraffe™ Shuttle™ founds **One Baby. One Bed. solution.** The solution enhances the continuity of care by eliminating bed transfers and provides the power necessary for thermal and physiologic stability<sup>6</sup> during intra-hospital transport.
- Hands-free silence alarm** and **hand-free canopy lift** allows continuous sterile environment.

- Less negative touch:** While some handling is necessary, the Giraffe OmniBed Carestation minimizes stressful touches as it helps reduce bed transfers in the first critical 10 days and ensures the best position of the patient during procedures thanks to the full **360° rotating, pressure diffusing Baby Susan mattress.** Furthermore, the bed design encourages clinicians to provide positive touches and secure patient (bed tilting, XRay, canopy lift).
- The humidifier** is designed with universal precautions of sterility in mind to protect against infection by boiling small amounts of water and **directly inject the steam** into the environment (**ability to drain the system, no dedicated cleaning mode for humidifier**). Easy to change and refill water reservoir on the go. **2 weeks cleaning cycle\***.
- A quiet micro environment:** Giraffe OmniBed Carestation operates at **40 dBA sound level** which is below the AAP recommendation (45 dBA). In addition, its designs attenuates the outside noise level by about 12 dBA<sup>7</sup> (double wall design, hood cover, loudspeaker position).
- Easy Kangaroo care:** designed specifically to support parental bonding and contact as adjustable height, passthrough drawer, removable side wall panels. The patented mattress makes easy the first contact of the mother and the establishment of bonding to the child through barrier-free access - no disturbing components in the mother seating area. Furthermore, the Giraffe OmniBed Carestation helps create the needed cosy environment with **adapted alarm management** during skin to skin procedure, **simplified screen** for parents.



Bonding to the child through barrier-free access

- Secure additional equipments from both sides' rails and customize your own care station.

# Giraffe Incubator Carestation

Newborns in the NICU need extra special care from clinicians and their families. As one of the most advanced, neurodevelopmentally supportive closed microenvironments, the Giraffe Incubator Carestation is specially designed to give babies the comfort and stability they need to grow, heal and go home healthy. Features include:

- **Air boost protects the baby from heat loss** when either panel is opened to support thermal stability.
- **Large color display (10.4") and touchscreen user interface** helps clinicians streamline their workflow while monitoring and controlling the baby's environment.
- **Customized screens** contribute to the personalized, patient and family-friendly care environment while providing continued visual monitoring.
- **Hands free alarm silence** allows clinicians to quickly silence the alarms while providing care and maintaining a quiet environment
- **Patented Baby Susan 360 ° rotating mattress** enhances productivity by allowing the clinician to easily position the baby for clinical procedures, optimizing their efforts to get it right the first time and minimizing unnecessary baby stimulation.
- **Pressure diffusing mattress** reacts to the impact of the baby's body, reducing pressure points while minimizing motion, and disruption and maximizing comfort.
- In **Whisper Quiet Mode**, the Giraffe Carestation delivers a quiet acoustic environment. As the Giraffe Carestation provides a low noise level (40 dBA), the ambient noise in the NICU room becomes the major factor affecting neonate noise exposure in incubators.
- **Smart Graphics trends** help closely monitor changes in weight, thermo-regulation, humidity & servo oxygen.
- **Connectivity capabilities** enables communication with electronic healthcare records and hospital information systems; it is equipped for future updates and upgrades.

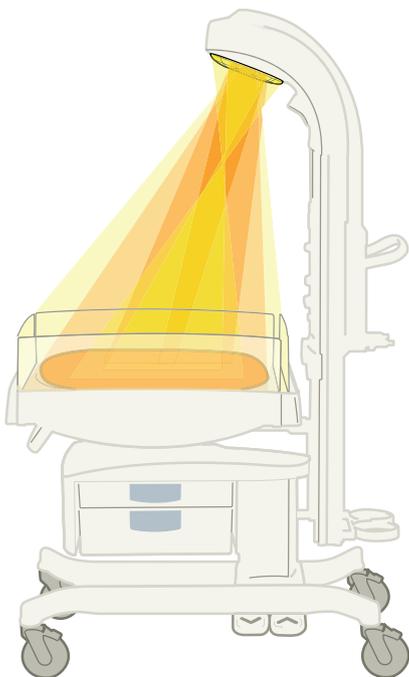


# Giraffe Warmer

The Giraffe Warmer delivers powerful, uninterrupted thermal performance with fully-integrated features and options.

The result? A warm, comfortable, and developmentally-supportive environment for the baby. Complete access, visibility and control for the caregiver.

- **Recessed Heater** provides exceptional access and consistent, focused heat therapy during interventions.
- **Warm up with no nuisance alarms** prepares the surface for the baby without interrupting your caregiver activities – heater warmup time at 100% power is less than 3 minutes.
- **Hands-Free Alarm Silence** allows you to control alarms without touching any surfaces during procedures.
- **Full-color Display** was designed to be easy to read nearby or from far. Full color trends track temperature, pulse rate, SpO<sub>2</sub>, and weight.
- **Integrated Resuscitation option** helps to standardize the resuscitation practice.
- **Built-in, dimmable observation lights** and adjustable procedure light provide the lighting you need, when and where you need it.
- **Tall wall configuration** available to accommodate term babies.
- **Giraffe Shuttle compatibility for One Baby. One Bed. workflow**



## Heat where you need it

The patented Hourglass Heat Profile provides uniform heat coverage across the mattress and the baby without warming the caregivers.



# Giraffe Shuttle

The Giraffe Shuttle converts any Giraffe bed into a mobile NICU care station. It offers up to 45 minutes of electrical power<sup>8</sup> to Giraffe beds, allowing you to provide continuity of care for sick babies while helping to provide a simplified and efficient intra-hospital transport for the infant. Fewer bed transfers and a simpler & quicker patient move – staff and patient stress reduction.

- **Reduce the need for bed-to-bed transfers thanks to the One Baby. One Bed. solution**

The Giraffe Shuttle, in combination with the Giraffe bed, helps reduce the potential clinical problems that can result from interrupted patient thermal regulation, patient touch, handling and movement, potentially challenging physiological stability when moving babies to and from a transport incubator.

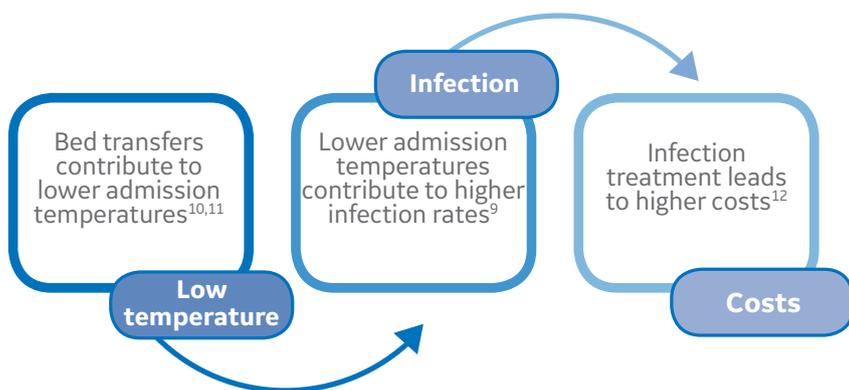
- **Customize your intra-hospital transport system.**

The Giraffe Shuttle provides the capability of mounting various accessories and auxiliary equipment.

- **Enjoy maneuverability.** The Giraffe Shuttle connects smoothly with any Giraffe; designed to make it easier for you to steer the bed in tight spaces, through doorways, down hallways, and around corners.

- **Achieve workflow efficiency.** In addition to all of its clinical advantages, the Giraffe Shuttle can help save time spent on transferring a baby from one bed to another and reduce the number of pieces of equipment to clean.

For every 1°C decrease in NICU admission temperature, the odds of late-onset sepsis were increased by 11% and the odds of dying were increased by 28%<sup>9</sup>



Giraffe beds combined with the Giraffe Shuttle eliminate the stress of moving sick babies from one bed to another.

# Phototherapy solutions



**Giraffe Blue Spot PT Lite** – Offers high-intensity spot phototherapy for effective treatment of hyperbilirubinemia.

- **Developmental care focus:** Phototherapeutic Blue LED Light in one bulb only with a high irradiance and a narrow wavelength. Since the light source is tucked safely away in a box well removed from your patients, it protects the baby from ambient noise and heat.
- **Lightweight package, innovative gooseneck design:** focused light therapy directed at the patient minimizing undesired exposure, full integration with the Giraffe devices to save valuable NICU space.
- **Lower Total Cost of Ownership:** significant bulb cost savings, lasts up to 10,000hrs, significantly lower in-service costs (device downtime) than halogen and fluorescent bulbs.



**BiliSoft™ LED Phototherapy System** – Intensive therapy<sup>13</sup> as easy as wrapping a baby in a blanket – while promoting developmental care and parent-infant bonding.

- **A flexible LED pad** brings light to the patient for a soft treatment maintaining skin integrity and allowing swaddling wherever baby is.
- **High Output Intensity** depending on the size of pad chosen, short and focus wavelength, long lasting light source (8,000 to 10,000 hours).
- **Designed for developmental care and family-centered care** – allows parents to bond with the child, does not block access to the bed, non-interruptive therapy.

**Combined together, the Giraffe Blue Spot PT Lite and BiliSoft LED Phototherapy System** deliver healing phototherapy that meets and exceeds the recommendations of the American Academy of Pediatrics<sup>14</sup> to provide intensive phototherapy treatment: high irradiance while maximizing surface treatment coverage.



**BiliBlanket Light Meter II** – Provides a reliable measure of light emission performance from phototherapy systems.

# Resuscitation solutions

The **Giraffe Stand-alone Infant Resuscitation System** puts the life-saving capabilities your patients need right at your fingertips.

## Clinical Efficacy

- Improved transition time for adjustment of the T-Piece system results in an approximately 3x faster transition to the desired pressure and correspondingly fewer breaths within the transition time.<sup>15,16</sup>
- Easy to use with single knob to adjust PIP combined with a PIP override release knob to safely control the delivery of pressure > 30 cm H<sub>2</sub>O.

## All-in-one system

- Combines all critical features (as per ERC guidelines) to deliver a complete solution.
- Supports both T-piece and bag and mask configurations, suction, blended air/O<sub>2</sub> gas delivery, precise pressure and flow controls.

## Streamlined design

- Quick, convenient, and unobstructed access to suction, blended gases, and monitored positive pressure capability.
- Innovative T-piece circuit promotes comfortable hand positioning and single-handed control of breathing.

## Compact and portable

- Accepts both wall and tank gas inputs.
- Priority valve conserves tanks so they are available for transport.
- Quick and easy set-up at the bedside or on the go.
- Flexible mounting options on the Giraffe Shuttle, from roll-stands to GCX arms.



T-piece Resuscitation System



Bag-and-Mask Resuscitation System

The resuscitation systems are also available as an integrated option on the Giraffe Warmer.

# Accessories



**Giraffe OmniBed hood cover** 6600-0825-800

**Giraffe Incubator hood cover** 6600-0846-800



**Corner trays**

SE & NW  
6600-1793-500  
SW & NE  
6600-1794-500



**Giraffe tubing management arm**

6600-0837-800



**Giraffe silo support**

6600-0853-800

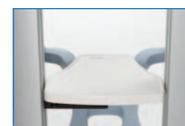


**Dovetail basket assembly**  
M1187887



**Swivel instrument shelf** (12 in x 12 in)

90° / 6600-0865-700  
360° / 6600-0513-801



**Giraffe Shuttle center shelf with shelf restraints attached**  
M1171297



**IV pole dual hook**  
12" 0217-5378-800  
24" 6600-0491-801



**IV pump mounting post**  
(20 in x 1 in)  
0217-5376-800



**GCX articulating arm with channel monitor/display mount**  
16" M1235864  
8" M1236833



**North end dovetail handle**  
M1159084



**Utility post (3.5 x 1 in) dovetail**  
0217-5374-800



**Cord wrap holders (2)**  
M1151830



**Ventilator mounting pole**  
0217-5357-800



**Retaining clips (6)**  
6600-0055-851



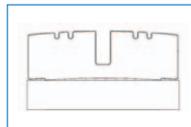
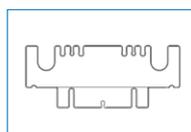
**Giraffe easy-load E-cylinder holder**  
6600-0836-800



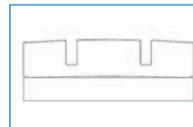
**Dovetail rail mount and slide bracket (female)**  
6600-0031-900



**South end DIN rail**  
M1181783



**Tubing management wall**  
North 6600-2146-500  
South M1092337



**HFOV side walls (2) east/west**  
Giraffe M1092332



**Higher side wall kit**  
Includes: (2) east/west and (1) south wall  
M1179223

Giraffe Family options		Giraffe Family options	
	Part Numbers		Part Numbers
Giraffe Pressure Diffusing mattress	M1046467	T-piece, disposable (10 pack)	M1091335VS
Foam mattress	6600-1116-500	T-piece, disposable with mask size 0 (10 pack)	M1091316VS
Humidification reservoir	6600-0216-850	T-piece, disposable with mask size 1 (10 pack)	M1091365VS
Air filter (10 pcs.)	6600-0207-850	Suction canister – 800 cc (box of 100)	M1154789
Disposable patient probe (box of 10)	2074816-001	Canister Hydrophobic (1 pcs)	M1064655
Disposable patient probe (box of 50)	2074817-001	Giraffe Exam Light IEC Plug	6600-0832-803
Reusable patient probe	2075796-001	Giraffe OmniBed Retrofit Kit for Enhanced Canopy Seal	M1208286
Heat reflecting patch (box of 50)	2044385-001	RS-232 Service Kit	6600-0257-850



**BLUE connector for Giraffe Warmer (GE Masimo/Masimo SET1)** **Part Numbers**

LNCS	
Masimo interface cable, rectangular connector, 3.6 m	2017002-001
Masimo interface cable, rectangular connector, 1.2 m	2017002-002
Masimo interface cable, rectangular connector, 2.4 m	2017002-003
Masimo LNCS Infant Adhesive Sensor, 20/box	2051068-001
Masimo LNCS Neonatal Adhesive Sensor, 20/box	2051069-001
Masimo LNCS Neonatal PT Adhesive Sensor, 20/box	2051070-001
RD	
RD Set GE-05, Patient cable, 1.5 m	MASIMO-RD-4084
RD Set GE-12, Patient cable, 3.6 m	MASIMO-RD-4085
RD Set PDT, Adhesive Sensor, Box 20	MASIMO-RD-4001
RD Set INF, Adhesive Sensor, Box 20	MASIMO-RD-4002
RD Set NEO, Adhesive Sensor, Box 20	MASIMO-RD-4003
RD Set NEO PT, Adhesive Sensor, Box 20	MASIMO-RD-4004

**RED connector for Giraffe Warmer (Masimo Rainbow/Masimo SET2)** **Part Numbers**

LNCS	
Masimo MX-3 LNCS-10 GE Cable, 3.0 m	2059006-001
Masimo LNCS Infant Adhesive Sensor, 20/box	2051068-001
Masimo LNCS Neonatal Adhesive Sensor, 20/box	2051069-001
Masimo LNCS Neonatal PT Adhesive Sensor, 20/box	2051070-001
RD	
RD Set MD20-05, Patient cable, 1.5 m	MASIMO-RD-4103
RD Set MD20-12, Patient cable, 3.6 m	MASIMO-RD-4104
RD Set PDT, Adhesive Sensor, Box 20	MASIMO-RD-4001
RD Set INF, Adhesive Sensor, Box 20	MASIMO-RD-4002
RD Set NEO, Adhesive Sensor, Box 20	MASIMO-RD-4003
RD Set NEO PT, Adhesive Sensor, Box 20	MASIMO-RD-4004

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**Nellcor** **Part Numbers**

SpO <sub>2</sub> Adapter Cable, DOC10, 2.9 m for DINAMAP Pro 1000 v2, Pro and ProCare	2008773-001
Cable DOC-4 Pulse Oximetry Interface Cable, 1.2 m	2059001-001
Cable DOC-4 Pulse Oximetry Interface Cable, 2.4 m	2059000-001
SpO <sub>2</sub> -Sensor MAX-N, Neo, Adhesive (24/box)	70124032
SpO <sub>2</sub> -Sensor MAX-P, PED (24/box)	70124022
SpO <sub>2</sub> -Sensor MAX-I, INF (24/box)	70124026

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- 2 Knobel, R. (2007). Thermoregulation and heat loss prevention after birth and during neonatal intensive-care unit stabilization of extremely low-birth weight infants. *JOGNN*, May-Jun, 36, (3), 280-7.
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- 7 Wubben, et al: 2011 The sound of operation and the acoustic attenuation of the Ohmeda Medical Giraffe OmniBed Noise Health J. 13:50 37-44
- 8 Batteries are a fixed life storage device. As such, the use and care of the batteries will greatly affect battery life. Heavy loads and long run times will drastically reduce the life of the batteries. Refer to the product labeling for additional information. Giraffe Carestation or Panda Warmer combination and Giraffe Shuttle comply to IEC 60601-2-19, Medical electrical equipment (Giraffe OmniBed Carestation or Panda Warmer obtains power during transport, all functions are fully supported, temp & O<sub>2</sub> values are shown and visual and audio alerts are working in the event of any deviations).
- 9 Laptook AR, et al. Admission temperature of low birth weight infants: Predictors and associated morbidities. *Pediatrics* 2007; 119:e643-e649.
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