GE Healthcare

Lullaby LED Phototherapy System

Excellent clinical performance, effortlessly achieved, for a lifetime of savings





It always starts with excellent clinical performance

An astounding 80% of pre-term and 60% of full-term infants are at risk of hyperbilirubinemia. The Lullaby* LED equips you to deliver high-intensity phototherapy to treat this potentially hazardous condition.

Optimal 458-nm wavelength

Our LEDs focus tightly on the optimal wavelength (450-465nm) for maximizing bilirubin metabolism.

Ideal irradiance levels

With a high irradiance of 45 μ w/cm²/nm and a low irradiance at 22 μ w/cm²/nm, Lullaby LED allows treatment tailored to each patient's needs.

Uniform light distribution

Our optical design ensures uniform light distribution to the patient's exposed surface area, maximizing bilirubin breakdown.



Lullaby LED focuses tightly on the optimal 458-nm wavelength for maximum bilirubin metabolism.

Designed to promote developmental care for infants

Whisper-quiet operation

Designed with no fan and no other mechanical moving parts, it operates at 22.4 dB(A) – significantly quieter than prescribed IEC guidelines of 60 dB(A).

No spill, no glare

Our innovative optical design minimizes spill light outside the bed so neither caregivers nor other patients receive undesired exposure to light from the Lullaby LED.



Lullaby LED provides high intensity coverage of total body surface area. Above represents the light delivery to a full-term (38-week) infant.



The combination of optimal wavelength, high intensity and uniform light distribution yields a 28% faster total serum bilirubin breakdown¹

1 Based on calculations from Osaku NO, Lopes HS. A dose response model for the conventional phototherapy of the newborn. Journal of Clinical Monitoring and Computing. 2006;20(3):159-164

Treat the patient, not the equipment

The Lullaby LED PT is designed to be user friendly and provide worry-free operation day after day.

Removable head - For seamless use with incubators Light weight - Only 10 kgs for exceptional maneuverability Ultra compact - Small footprint takes minimal space Adjustable height - By up to 47 cm

 ${\bf Lamp}\ {\bf unit}\ {\bf tilt}\ {\bf -}\ {\bf Up}\ {\bf to}\ {\bf 90}^\circ\ {\bf tilt}, allowing\ {\bf use}\ {\bf in}\ {\bf conjunction}\ {\bf with}\ {\bf a}\ {\bf radiant}\ {\bf warmer}$

Omnidirectional, small wheels – Slide under most bassinets or warmers



An investment for today and tomorrow

Almost 6 years of night and day performance

Our LEDs are rated to last up to an incredible 50,000 hours² before requiring replacement: 50X longer than CFL tubes that require replacement every 1000 hours.

Result? A dramatic reduction in replacement costs, including cost of downtime.

Only 20-watt power consumption

Operating at just 20 watts – up to 80% less than other phototherapy systems – the Lullaby LED can offer almost US\$400 in energy savings over the life of the LEDs.³

- 2 Before a 30% drop in irradiance. Rating is by LED manufacturer under specified operating conditions
- 3 Over lifetime of 50,000 hours compared to a 100 Watt phototherapy system, assuming a rate of \$0.1 per kWh of electricity

High performance. High productivity. And a total cost of ownership that's almost too good to be true.



Clinical Performance



Ease of Use



Total Cost of Ownership

Introducing the Lullaby LED phototherapy system with cutting-edge LED technology. It's just what you would expect from a system that builds on the Lullaby legacy. Because every baby deserves the highest standard of care.

Specifications

Performance specifications

| Spectral irradiance * Using an Ohmeda Medical BiliBlanket* Meter II | High irradiance mode: > 45 µW/cm²/nm |
|---|--|
| | Low irradiance mode: > 22 µW/cm²/nm |
| Wavelength range | Dominant wave length range of 450-465 nm |
| LED lamps | LED lamps are rated to last up to 50,000 hours at high power (with 30% lumen depreciation) |
| Maximum noise level | 22.4 dB (A) |

Physical specifications

| Overall dimensions $(L \times W \times H)$ | 530 mm x 550 mm x 1700 mm (at maximum height) |
|--|--|
| Total unit weight | 10 kg |
| Footprint | 530 mm x 550 mm |
| Height adjustment | 1130 mm to 1600 mm from light source to floor (Adjustment of 470 mm) |
| Lamp unit weight | 2 Kg |
| Lamp unit dimensions | 360 mm x 230 mm x 80 mm |
| Lamp unit tilt | Continuous up to 90° |
| Effective surface area | 50 cm × 30 cm at 35 cm from the light source |
| Uniformity ratio | > 0.4 (IEC Compliant) |
| Packaging details | |
| Box dimensions | 1070 mm x 500 mm x 210 mm |
| Total package weight | 13.5 Kg |



GE Healthcare 8880 Gorman Road Laurel, MD 20723 U.S.A.

www.gehealthcare.com



GE imagination at work

Electrical specifications

20 W maximum at 100-240 V ~ 50/60 Hz

| Overheat protection | Power cutoff for temperature \geq 85° C |
|---------------------|--|
| Touch current | Less than 500 µA at 264 VAC RMS (power on) with ground intact for normal and reverse polarity and with ground open for normal and reverse polarity |

Environmental operations

| Ambient temperature | +10° C to +40° C |
|----------------------|------------------------------|
| Humidity | 20% to 95% RH non-condensing |
| Atmospheric pressure | 70 kPa to 106 kPa |

Storage and transportation requirements

| Temperature | 0° C to +70° C |
|----------------------|------------------------------|
| Humidity | 10% to 95% RH non-condensing |
| Atmospheric pressure | 50 kPa to 106 kPa |

Regulatory standards

| IEC class 1 (continuous operation) | TUV Rheinland CB certified to the following standards: IEC 606001-2- 50; IEC 60601-1; IEC 60601-1-2 |
|---------------------------------------|---|
| EMC class-A, CISPR 11, group 1 | Certified under IECEE CB scheme |

The Lullaby LED is backed by GE Healthcare, a stable partner with global resources to provide you with prompt, expert service support when you need it. Contact your GE Healthcare representative.

About GE Healthcare

Healthymagination is GE's \$6 billion commitment to improve health care access, affordability and quality through advanced technologies, research and development.

© 2011 General Electric Company – All rights reserved.

General Electric Company reserves the right to make changes in specifications and features shown herein, or discontinue the product described at any time without notice or obligation. Contact your GE Representative for the most current information.

GE and GE Monogram are trademarks of General Electric Company.

*Lullaby and BiliBlanket are trademarks of General Electric Company.

All other company and product names mentioned may be trademarks of the companies with which they are associated.

GE Medical Systems, a General Electric company doing business as GE Healthcare.

MIC-0272-08.11-EN-US DOC0995660