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 x W x 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



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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	TUV Rheinland CB certified to the
(continuous operation)	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.

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MIC-0272-08.11-EN-US DOC0995660