

The **neoBLUE** LED Phototherapy System incorporates optimal blue LED technology for the treatment of newborn jaundice.



Meets AAP Guidelines for intensive phototherapy¹

Intensity: Delivers intensive phototherapy: $> 30 \mu\text{W}/\text{cm}^2/\text{nm}$.

Spectrum: Utilizes blue light emitting diodes (LEDs)

- neoBLUE LEDs emit blue light in the 450-470 nm spectrum matching the peak absorption wavelength (458 nm) at which bilirubin is broken down²

Surface area coverage: Exposes length of baby from head to toe.



neoBLUE system positioned on an incubator

Safe

- neoBLUE LEDs do not emit light in the ultraviolet (UV) range
 - reducing the potential risk of skin damage
- neoBLUE LEDs do not emit light in the infrared radiation (IR) range
 - reducing the potential risk of fluid loss

Designed for efficacy and precision

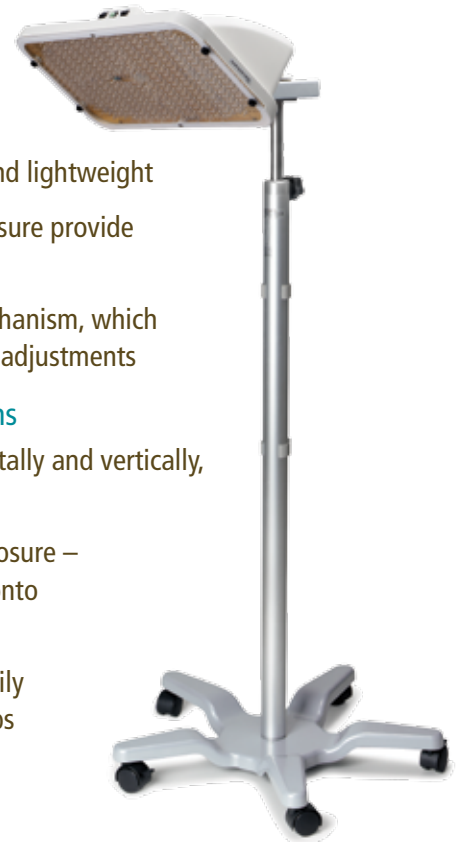
- With a simple flip of a switch, change from single ($> 12 \mu\text{W}/\text{cm}^2/\text{nm}$) to double ($> 30 \mu\text{W}/\text{cm}^2/\text{nm}$) phototherapy
- Unique red target light enables precise centering of light over baby

Designed for convenience

- Light enclosure is compact in size and lightweight
- Smooth, curved edges of light enclosure provide added safety and ease in handling
- Roll stand includes a gas shock mechanism, which maintains a safe height during pole adjustments

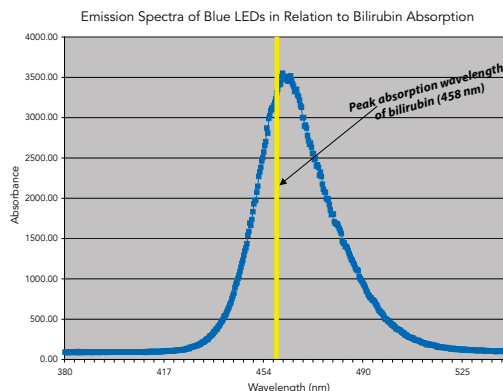
Designed for multiple configurations

- Can be easily adjusted both horizontally and vertically, and tilted over a wide angle range
- Rubber feet supplied with light enclosure – allowing stable placement directly onto incubators
- Base of roll stand is designed to easily slide under most incubators and cribs



Optimal efficiency

- neoBLUE LEDs reduce costly and time-consuming bulb replacements by providing thousands of hours of use
- Life testing has shown neoBLUE LEDs can emit high intensity phototherapy for over 20,000 hours*
- Biomedical engineers can adjust the output of the neoBLUE LEDs using a potentiometer
- Device timer assists in tracking overall usage of neoBLUE LED panel
- neoBLUE LED panel is field serviceable – no downtime associated with patient care



neoBLUE LEDs emit blue light in the 450-470 nm spectrum. This range corresponds to the peak absorption wavelength (458 nm) at which bilirubin is broken down.



neoBLUE system shown with drape accessory

Ordering information

Item	Part Number
neoBLUE LED Phototherapy System (includes light enclosure and roll stand)	010066
Light Enclosure (available separately)	001376
Roll Stand (available separately)	030704
Drape for neoBLUE 3 Light	001241
Biliband Eye Protectors	
Regular Size	900642
Premature Size	900643
Micro Size	900644



Technical specifications

Light source	Blue and Yellow LEDs
Wavelength	- Blue: Peak between 450 and 470 nm - Yellow: Peak between 585 and 595 nm Peak central intensity at 12 in (30.5 cm) > 12 μW/cm ² /nm > 30 μW/cm ² /nm
Intensity	- Low setting - High setting
Variation in intensity over 6 hrs	< 10% (within illumination area)
Effective surface area	20 x 10 in (50 x 25 cm)
Intensity ratio	> 0.4 (minimum to maximum)
Heat output (at 12 inches (30.5 cm) over 6 hrs)	< 18° F (10° C) warmer than ambient
Electrical mains	85–264V~, 47 to 63 Hz 3A, 100-240V~, 50/60 Hz
Fuses	4A @ 100-120V~, 50/60 Hz 2A @ 200-240V~, 50/60 Hz
Safety	
Leakage current	< 100 μA
Audible Noise	< 60 dB
Dimensions	
Maximum Height	< 6 ft (1.83 m)
Weight	< 8.0 lbs (3.6 kg) (light enclosure only) < 40 lbs (18 kg) (with roll stand)
Environmental	
Operating Temperature/Humidity	59° F to 95° F (15 to 35° C) / 0% to 90% non condensing
Storage Temperature/Humidity	-22° F to 122° F (-30 to 50° C) / 0% to 90% non condensing
Roll stand	
Height of diffuser from ground	adjustable from 42 to 59 ± 3 inches (1.07 m to 1.50 m ± 7.6 cm)
Center of diffuser from post	adjustable from less than 9 to 13 ± 1 inches (22.9 cm to 33 cm ± 2.5 cm)
Tilt adjustment of enclosure	0° (horizontal) to approx. 40°
Clearance of base from floor	< 4 inches (10.2 cm)
Base	5 legs with casters (2 locking casters)
Regulatory standards	Type BF IEC 60601-1 IEC 60601-1-2 IEC 60601-1-2-50 CSA C22.2 601.1

Note: Specifications are subject to change without notice.

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¹ Subcommittee on Hyperbilirubinemia. American Academy of Pediatrics clinical practice guideline: Management of hyperbilirubinemia in the newborn infant 35 or more weeks of gestation. *Pediatrics*. 2004; 114(1):297-316

² Vreman HJ, et al. Light-emitting diodes: a novel light source for phototherapy. *Pediatric Research*. 1998; 44(5):804-809

*Actual results may vary based on environmental factors and adjustments to the potentiometer.

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