neoBLUE® LED phototherapy system

Incorporates optimal blue LED technology for the treatment of newborn jaundice

neoBLUE system positioned over an incubator

Meets AAP guidelines for intensive phototherapy[1]

Intensity: Features 2 intensity settings to switch between standard (15 µW/cm²/nm) and intensive (35 µW/cm²/nm) phototherapy

Spectrum: Utilizes blue light-emitting diodes (LEDs)

- To emit blue light in the 450 - 475 nm spectrum matching the peak absorption wavelength (458 nm) at which bilirubin is broken down[2]

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

neoBLUE is designed for:

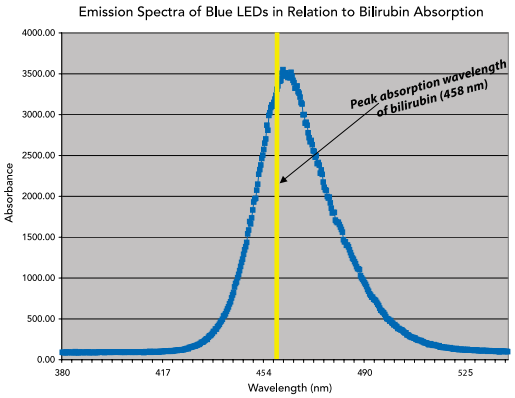
- Efficacy and precision
- Convenience
- Flexibility with multiple configurations available

natus®

neoBLUE® LED phototherapy system

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 50,000 hours[3]
- 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 - 475 nm spectrum. This range corresponds to the peak absorption wavelength (458 nm) at which bilirubin is broken down.

neoBLUE system shown with drape accessory

References

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.

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

Ordering Information

Item	Part #
neoBLUE LED Phototherapy System (includes light and roll stand)	
115V, US power supply	010066
230V, EU power supply	010068
230V, UK power supply	010069
230V, AU power supply	010070
(includes light only)	
115V, US power supply	001376
230V, EU power supply	001378
230V, UK power supply	001379
230V, AU power supply	001380
Roll stand (available separately)	010814
Drape for neoBLUE light	001241

Technical Specifications

Light Source	Blue and Yellow LEDs
Wavelength	– Blue: Peak between 450 - 475 nm – Yellow: Peak between 585 - 595 nm
Intensity	Peak central intensity at 12 in (30.5 cm)
Low setting	15 ±2 µW/cm²/nm
High setting	35 ±3.5 µW/cm²/nm
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 in (30.5 cm) over 6 hrs)	< 18°F (10°C) warmer than ambient

Electrical Mains	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	< 10 lb (4.5 kg) (light enclosure only) < 40 lb (18 kg) (with roll stand)

Environmental	
Operating temperature/humidity	59° - 95°F (15° - 35°C)/10% - 90% non-condensing
Storage temperature/humidity	32° - 122°F (0° - 50°C)/10% - 90% non-condensing

Roll Stand	
Height of lens from ground	Adjustable from 42 - 59 ± 3 in (1.07 m - 1.50 m ± 7.6 cm)
Center of lens from post	Adjustable from less than 9 - 13 ± 1 in (23 cm - 33 cm ± 2.5 cm)
Tilt adjustment of enclosure	0° (horizontal) - approx. 40°
Clearance of base from floor	< 4 in (10.2 cm)
Base	Five legs with locking casters

Regulatory Standards	
	IEC 60601-1
	ES 60601-1
	CAN/CSA-22.2 No. 60601-1
	IEC 60601-2-50
	IEC 60601-1-2

Healthcare solutions with one thing in mind. You.

P/N 000931F

natus®

Natus Medical Incorporated

natus.com