natus
newborn care

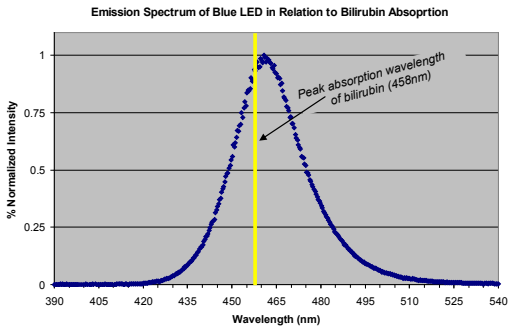
neoBLUE® blanket

LED Phototherapy

The **neoBLUE blanket** LED Phototherapy System provides intensive phototherapy in a soft and flexible design.

- **Meets AAP guidelines**
- **Promotes infant/ patient bonding**
- **Allows swaddling baby during treatment**

The **neoBLUE blanket** LED Phototherapy System is positioned underneath the baby to deliver phototherapy via a blue LED light source.



Most effective degradation of bilirubin[1]

The neoBLUE blanket LED Phototherapy System meets AAP Guidelines for intensive phototherapy[2]

- **Intensity:** Delivers intensive phototherapy: > 30 µW/cm2/nm
- **Spectrum:** Utilizes blue light emitting diode (LED) technology
  - The neoBLUE LED emits blue light in the 450-475 nm spectrum – matching the peak absorption wavelength (458 nm) at which bilirubin is broken down[1]
- **Surface area coverage:** Large blanket delivers phototherapy over greater surface area than other fiberoptric devices

Safe

- The neoBLUE LED does not emit light in the ultraviolet (UV) range – reducing the potential risk of skin damage
- The neoBLUE LED does not emit light in the infrared radiation (IR) range – reducing the potential risk of fluid loss
- Device automatically shuts off in the event of elevated temperature
  - Flashing indicator light alerts user to check for blocked air vents

Designed for comfort and support

- Streamlined, oval design conforms to the shape of the baby
  - Large and small size available
- Mattress provides comfortable cushioning underneath the infant
  - Disposable mattress covers ensure clean, soft surface for baby
- Blanket rolls or bumpers can be used as desired for added positioning and cushioning around the baby
- A baby blanket or neoBLUE blanket Swaddle can be used in conjunction with the neoBLUE blanket system for added warmth and comfort
- Baby can be held or nursed without interrupting phototherapy, encouraging parent-infant bonding

neoBLUE blanket system is available with optional hardware for pole-mounting applications

Optimal efficiency and ease of use

- The neoBLUE LED reduces costly and time-consuming bulb replacements by providing approximately 20,000 hours of use at high intensity*
- Device timer assists in tracking overall usage of LED light
- Light box automatically recognizes which blanket size is being used
  - Large and small sizes deliver consistent phototherapy levels

The **neoBLUE blanket** LED Phototherapy System facilitates use in multiple configurations and patient care settings.

Ideal for use in the NICU, well-baby nursery, or mother's room

- Portable and lightweight design allows transport to different locations
- Fits easily within existing patient enclosures, such as cribs, bassinets, radiant warmers and incubators

Allows infant-parent bonding

The baby may be swaddled or covered with a blanket for warmth during phototherapy.

The neoBLUE blanket system can be used in conjunction with an overhead neoBLUE light for additional phototherapy coverage

neoBLUE blanket system in a bassinet

neoBLUE blanket system in an incubator

Ordering information

Item	Part number
neoBLUE blanket LED Phototherapy System with large blanket	006244
neoBLUE blanket LED Phototherapy System with small blanket	006895
neoBLUE blanket, large pad kit	006245
neoBLUE blanket, small pad kit	006898
Mattress, large (Qty 2)	007281
Mattress, small (Qty 2)	007283
Disposable covers, large (Qty 50)	005989

Item	Part number
Disposable covers, small (Qty 50)	006897
neoBLUE blanket Swaddle** - Newborn (fits large pad)	008424
neoBLUE blanket Swaddle** - Preemie (fits small pad)	008425
Pole-mounting hardware	006914
Carrying case	007923
Biliband® Eye Protectors	
Regular size	900642
Premature size	900643
Micro size	900644

Mattress covers

neoBLUE blanket Swaddle**

Technical specifications

Light source	Blue LED (single)
Wavelength	Blue: Peak between 450 and 475 nm
Intensity	Peak intensity at patient surface > 30 µW/cm²/nm (factory set to 30-35 µW/cm²/nm; adjustable to > 50 µW/cm²/nm)
Variation in intensity over 6 hrs	< 10% (within illumination area)
Light emitting area (large blanket)	Approximately 7.25 in (18.4 cm) x 12.75 in (32.4 cm), 84 in² (542 cm²)
Light emitting area (small blanket)	Approximately 4.5 in (11.4 cm) x 10 in (25.4 cm), 40 in² (259 cm²)
Effective treatment area (large blanket)	Approximately 78.8 in2 (508 cm²)
Effective treatment area (small blanket)	Approximately 47.7 in2 (308 cm²)
Intensity ratio	> 0.4 (minimum to maximum)
Heat output	104° F (40° C) maximum surface temperature
Electrical specifications	
Input	
Voltage	100–240 V~
Current	1.5 A
Frequency	50–60 Hz
Power supply output	(Use only with Natus power supply)
Voltage	12 V ⎓
Power	100W maximum
Current	8.3A
Safety	
Main enclosure leakage current	< 100 µA
Earth leakage current	< 250 µA
Audible noise	< 35 dB
Dimensions	
Width x Length x Height (light box)	4.5 in (11.4 cm) x 9 in (22.9 cm) x 5.5 in (14 cm)
Weight (light box)	3.3 lbs (1.5 kg)
Environmental	
Operating temperature/humidity	41° to 86° F (5° to 30° C) / 10% to 90% non condensing
Storage Temperature/humidity	-22° to 122° F (-30° to 50° C) / 10% to 90% non condensing
Altitude / atmospheric pressure	-1000 feet to +1000 feet (700 hPa to 1060 hPa)
Regulatory standards	
FDA classification	Class II/21CFR 880.5700
MDD classification	IIa, (Annex IX, Rule 9, active therapeutic device)
Electrical safety	UL 60601-1:2006, CSA C22.2 601-1-M90:2005, IEC 60601-1:1988; A1:1991; A2:1995, IEC 60601-1:2005, ES 60601-1:2012, CSA C22.2 601-1-08:2001
EMC [Class B]	IEC 60601-1-2:2007
Device specific safety	IEC 60601-2-50:2000, IEC 60601-2-50:2010
Biocompatibility	ISO 10993-1:2003; ISO 10993-5:1999; ISO 10993-10:200

Note: Specifications are subject to change without notice.

- **Streamlined, oval design conforms to the shape of the baby**
- **Ultra quiet operation**

natus®

Natus Medical Incorporated
1501 Industrial Road
San Carlos, CA 94070 USA
1-800-303-0306
+1-650-802-0400
www.natus.com

1 Vreman HJ, et al. Light-emitting diodes: a novel light source for phototherapy. Pediatric Research. 1998; 44(5):804-809
2 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.
* Actual results will vary based on environmental factors and adjustments to the potentiometer.
** HALO® SleepSack™ Swaddle customized for use with the neoBLUE blanket fiberoptic pad.