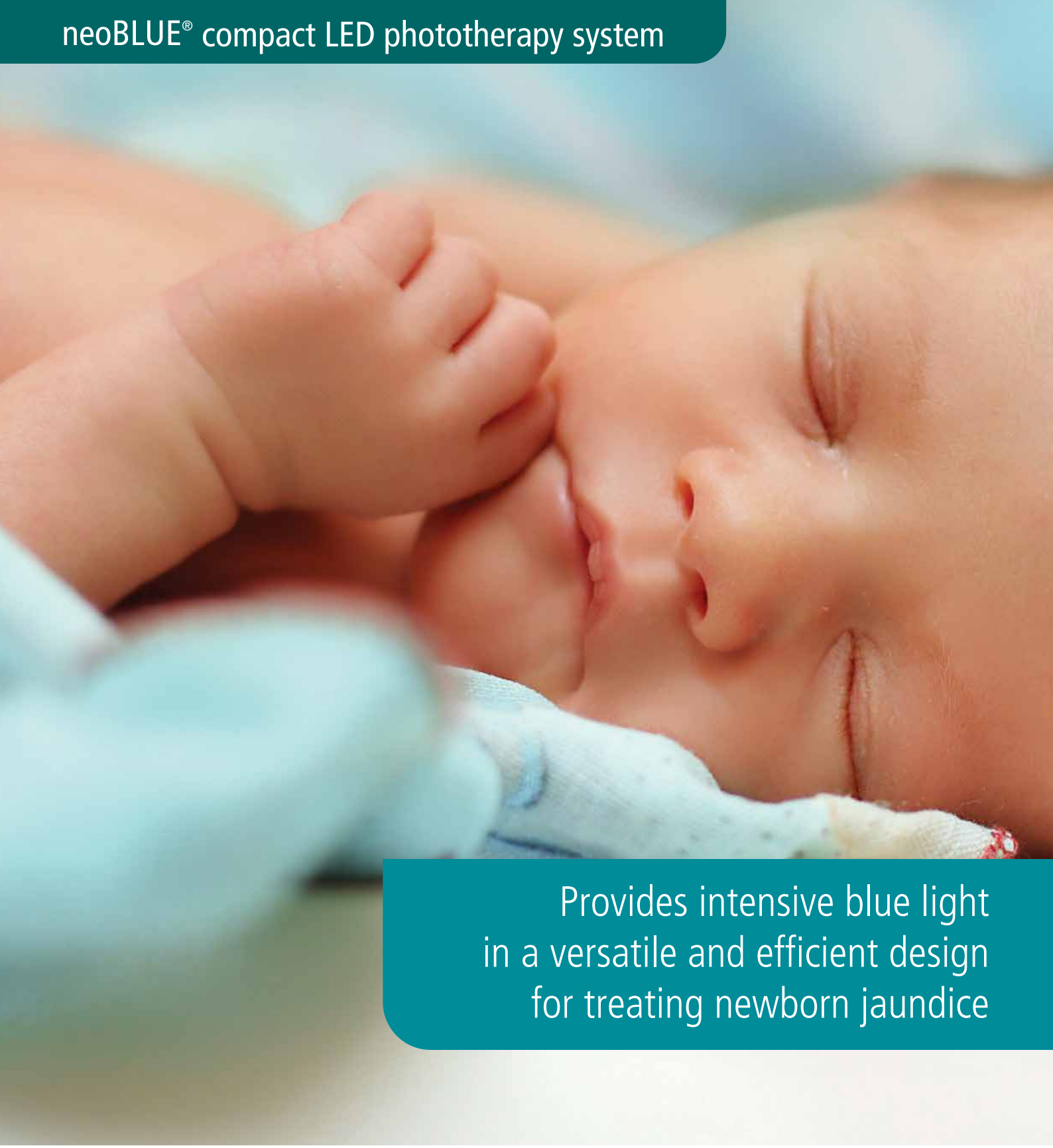
neoBLUE® compact LED phototherapy system



Provides intensive blue light
in a versatile and efficient design
for treating newborn jaundice

natus®

The neoBLUE compact LED Phototherapy system delivers performance and value with n

Meets AAP guidelines for intensive phototherapy[1]

- **Intensity:** Features two 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 - 470 nm spectrum, matching the peak absorption wavelength (458 nm) at which bilirubin in broken down[2]
- **Surface area coverage:** Exposes a large amount of the infant's skin to treatment

neoBLUE compact system positioned with suction cup feet on top of an incubator

Designed for multiple configurations

- Use the light independently by placing directly on top of an incubator
- Combine with the arm for attaching the pole-mount accessory of most incubators and radiant warmers
- Attach the light and arm to the roll stand and use for infants in a bassinet, open bed, incubator or radiant warmer

neoBLUE compact system with arm attached to the pole-mount on a radiant warmer

Smart arm design

- Arm-rotating joints and gooseneck provides multiple adjustment options with drift-free positioning
- Light and arm can be easily moved out of the way to attend to baby
- Nurses can easily attach and remove the light and arm at the bedside without tools

Safe

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

neoBLUE compact system positioned with arm and roll stand over a bassinet

herapy System provides incredible many user-selectable features

Designed for convenience and ease-of-use

neoBLUE LEDs reduce costly and time-consuming bulb replacements by providing over **40,000 hours** of use at high intensity[3]

Color-balanced for clinicians and families

- Twelve blue LEDs are mixed with a small amount of light from the white LEDs to soften the appearance of the blue treatment light while maintaining treatment efficacy
- Nurses and family sensitive to blue light will appreciate the softer baby blue appearance of the light

Brilliant white exam light

- Nine white LEDs provide bright illumination
- Neutral white light provides (true) color – ideal for general examination
- Perfect for monitoring babies, skin assessments, starting IVs, labs and basic exams
- Provides space-efficient solution with added functionality

neoBLUE® compact LED phototherapy system

Ordering Information

Item	Part #
neoBLUE compact LED Phototherapy System (includes light only)	019001
neoBLUE compact system w/arm (includes light and arm)	019011
Arm (available separately)	019030
Roll stand	019040

neoBLUE Radiometer
(P/N 53870-US)

neoBLUE compact system shown with NatalCare LX Drape (P/N 013138)

Technical Specifications

Light Source	Blue and White LEDs
Wavelength	Blue: Peak between 450 and 470 nm
Intensity	Peak intensity at 35 cm (13.75 in)
Factory setting	
Low	15 ±2 µW/cm²/nm (total irradiance 1200 µW/cm²)
High	35 ±2 µW/cm²/nm (total irradiance 2800 µW/cm²)
Adjustable setting	
Low	Approx. 10 - 35 µW/cm²/nm
High	Approx. 30 - 55 µW/cm²/nm
Variation in intensity over 6 hrs	< 1% (based on peak value within illumination area)
Effective surface area at 35 cm (13.75 in)	> 700 cm² (108.5 in²) Approx. 29 x 25 cm (11.4 x 9.8 in)
Intensity ratio	> 0.4 (minimum to maximum within effective surface area)
Heat output at 35 cm (13.75 in) over 6 hrs	< 1.7°C (3°F) warmer than ambient on mattress surface
LED life	> 40,000 hours of use at factory settings[3]

White Exam Light	
Color temperature	Approx. 4300K
Illuminance	Approx. 10,000 lux / 35 cm (13.75 in)

Electrical Mains	0.7A @ 100 - 240V~, 50 - 60 Hz

Safety	
Leakage current	< 100 µA
Audible noise	< 40 dB

Weight	
Light	< 1.2 kg (2.6 lb)
Arm	< 1.8 kg (4.0 lb)
Roll stand	< 10.9 kg (24 lb)

Roll Stand (with light and arm)	
Height of lens from ground	Adjustable from approx. 1.24 - 1.57 m (49 - 62 in)
Center of lens from post	Adjustable up to approx. 61 cm (24 in) at fully-extended arm
Tilt adjustment of enclosure	Total rotation angle of arm's interface block approx. 55°
Clearance of base from floor	< 10.2 cm (4 in)
Base	Five legs with locking casters

Environmental	
Operating temperature/ humidity	5° - 35°C (41° - 95°F) / 10 - 90% non-condensing
Storage temperature/humidity	-30° - 50°C (-22° - 122°F) / 5 - 95% non-condensing
Altitude/atmospheric pressure	-1000 - 20,000 ft (50 - 106 kPa)

Regulatory Standards	
	IEC 60601-1: Editions 2 and 3
	IEC 60601-2-50: Editions 1 and 2
	IEC 60601-1-2: Editions 3 and 4 (EMC)
	IEC 60601-1-6: 2010 (Usability)

Note: Specifications are subject to change without notice.

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 intensity settings.

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