

Lumens Medical Pvt. Ltd. Life Enhancing Technology An ISO 9001, ISO 13485, CE Certified Company

Hyper bilirubinemia treatment to New-borns with latest optical fiber based blue light therapy

# FIBER OPTIC BLANKET PHOTOTHERAPY

from Lumens Medical Pvt. Ltd.



- Higher spectral irradiance
- No spilling of intense blue light into infants eyes.
- Ideal irradiance: >35pW/cm2/nm
- Uniform illumination



# **Features**

- Ideal irradiance: > 35pW/cm2/nm
- Spectrum: 440-475nm with peak wavelength at 450nm
- Larger surface area: illumination area (25cm X 40cm)
- Innovative optical design: Provides uniform Illumination
- Device Timer: Monitor treatment time & LED usage
- Quite operation: Very low noise operation
- Long life LED source: 50,000 hours
- Flexible Blanket: Increases comfort & allows wrap over the baby

# Safety

- No ultraviolet (UV) emission.
- No infrared radiation (1k) emission.
- Automatic cut off for overheating.
- Blanket Detection logic: LED will turn on only if Blanket is connected.

# **Comparison to AAP Guidelines**

Components of Phototherapy	AAP Guideline*	LMBT-1 Blanket Phototherapy system
Light source (nm)	Spectral range 460- 490nm	Spectral range 440-475nm
Light irradiance (LW/cm2/nm)	32 [AW/cm2/nm]	Greater than 35 [AW/cm2/nm]
Body surface area (cm2)	Expose maximal skin area	Larger Blanket (25cm x 40cm)
Distance	Distance between the infant and the light source is critical to spectral irradiance level.	Direct contact with Baby's skin eliminates distance deficiency.

**Dimensions** 

**Operating conditions** 

\*American Academy of Pediatrics, Subcommittee on Hyperbilirubinemia.

Total Weight (Light Box & Blanket) : <3 kilograms

Light Box : 28cm(W) x 20cm(L) x 17cm(H)

Length of Fibre bundle : 125+5cm

Ambient temperature : +10°C to +35°C

**Transport & Storage requirements** 

Temperature : -40°C to +70°C

Humidity: 10% to 90% RH non-condensing

## **Electrical specifications**

Voltage : 180-260V AC (take care of voltage fluctuations) Frequency : 50-60 Hz Power (max) : 45Watts Fuse : 3.15A

### **Electrical Classification**

Type of protection against electrical shock : IEC Class 1 Degree of protection against electrical shock : Type B Mode of operation : Continuous



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**Emission spectrum of LED Source**