CALIDA Family

BioBusiness

BIOLUXY Phototherapy Device

BIOLUXY PT-20

Infant Led Phototherapy

BioLuxy PT-20 is engineered to deliver superior healthcare solutions

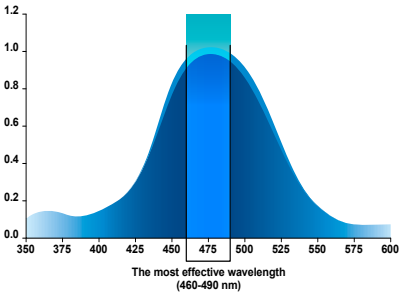
Jaundice affects approximately 60% of full-term newborns and up to 80% of premature infants globally, posing risks of irreversible brain damage.

The BioLuxy system offers high-intensity LED phototherapy to effectively treat this serious condition, ensuring safe and efficient care for neonates.

The Most Effective Wavelength: (450-465nm)

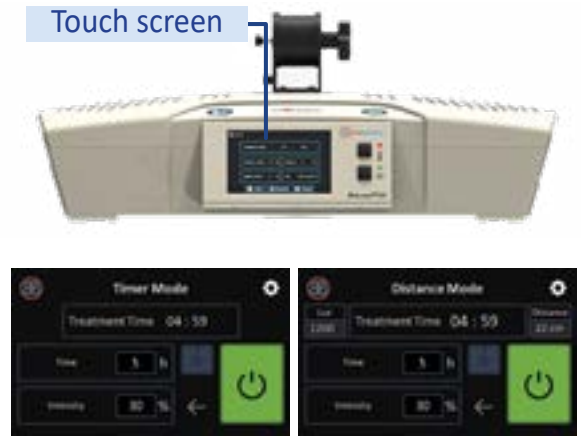
The most effective light in the blue region.

(450-465nm) for maximizing bilirubin breakdown.



Enhancing Jaundice Treatment Effectiveness with BioLuxy PT20

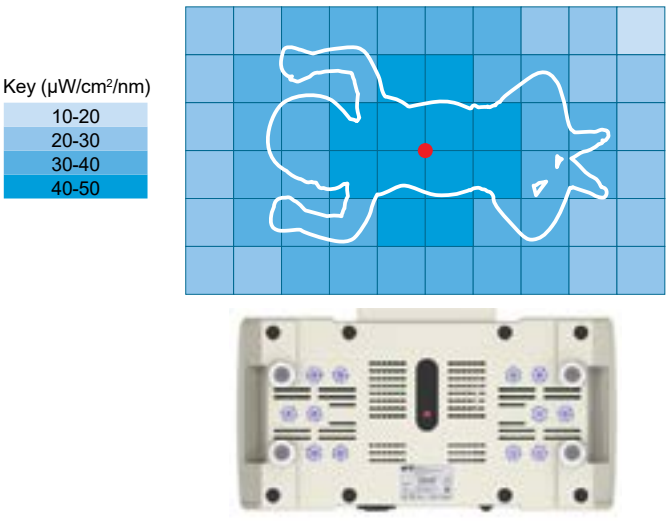
- With a high irradiance of 45µW/cm2/nm and low irradiance >20µW /cm2/nm, BioLuxy PT20 enhances the bilirubin breakdown ability and shortens the treatment time.
- With five levels irradiance adjustment, PT2 0 allows treatment tailored to each patient's needs.
- Distance sens or that allows automatic control of the intensity level.
- Irradiance meter that enables the user to determine the intensity reaching the baby.
- Two Modes of Operation:
  1. Timer Mode: The device operates for a selected duration and specified lux intensity.
  2. Distance Mode: Guarantees that a specific lux intensity, as set by the user, is delivered at a designated distance.



Uniform Light Distribution & Center Positioning

BioLuxy design ensure uniform light distribution to expose a large amount of infant's skin for treatment and maximizing bilirubin breakdown.

The red light lamp is used to locate the center point of blue light irradiation, ensuring that the baby receiving phototherapy is in the center of the irradiation area.



Electrical Specifications

The LED lifetime is up to 50,000 hours, ensuring clinical usage and minimizing the cost for the end users.

BioLuxy PT-20 Specifications

Technical Specification	
Wavelength Range	Dominant Wave Length Range of 450-465 nm
Irradiance	High Irradiance Mode: > 45 µ W /cm2/nm Low
	Irradiance Mode: > 22 µ W /cm2/nm
Number of Irradiance Intensity	5 Levels to allow treatment tailored to each patient's needs
Light Type	Blue-Light
Light Source	LED
Number of LEDs	12 LEDs
Light Source Safety	Thermal Protection
Display	4-inch LCD touch screen
Working Hours For The LED Unit	50,000 Working Hours
Effective Working Area	60 cm X 30 cm at 35 cm From LED light source
Baby's Center Pointer	Red Laser LED
Distance Meter Sensor	Allows the user to adjust the radiation distance
Irradiance Probe Port	Irradiance measurement with Radiometer device
Service Port	Allows the user to export the report for a completed phototherapy session
USB Mini Port	Provides system software upgrade
RS-232 Communication Port	Communication protocol for data transfer between the device and an external medical or non-medical device
Power on Indication	Green LED indicate power source is connected
Alarms	Visual red LED in Case of High Temperature, Hardware malfunction
Maximum Noise Level	22.4 dB (A)
Lux meter	Integrated with lux meter

Environmental operations	
Ambient Temperature	+5° to +40° C
Humidity	15% to 95% RH Non-Condensing
Atmospheric Pressure	700 hpa-1060 hpa

Electrical Specifications	
Power Supply	100-240V 50-60 Hz
Power	60W

Physical specifications	
LED Unit Dimensions	43X25X10 cm
LED Unit Tilt Angle	continuous 90°
Trolley Height	112-160 cm (Adjustable)
Trolley Base Dimensions	57 X 47 cm
Trolley Material	Anti Corrosion Material
LED Unit Weight	2.5 kg
Total Weight	12 kg

Regulatory standards

IEC 60601-1, IEC 60601-1-2, IEC 606001-2-50

LUXY METER

Ensure optimal light intensity for neonatal jaundice treatment with our Lux Meter. Designed for precise measurement, it helps monitor phototherapy light levels, ensuring safe and effective bilirubin breakdown in newborns. Reliable and easy to use, it’s an essential tool for maintaining the right treatment environment.

Luxy Meter Specifications	
Min. Effective Spectral Range	415 nm
Max. Effective Spectral Range	680 nm
Irradiance Range	0-107.67µW/cm2/nm
Accuracy	±10%
Probe	Built-in
Battery	3Volt 2AA batteries
Screen	OELD 1.3 inch
Diminutions	170 mm x 70 mm x 30 mm
Weight	140 g

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Pending

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