BiliBlanket® Plus High Output Phototherapy System

Description and Application
The Ohmeda Medical BiliBlanket® Plus High Output Phototherapy System consists of a lightweight and compact light source and pad that deliver therapeutic light for the treatment of neonatal jaundice. A unique, tightly-woven mat of over 2400 fibre-optic strands floods the blanket with uniform, concentrated high intensity light. UV and infrared radiation are filtered from the light, reducing the risk of skin and eye damage as well as the hazards of hyperthermia and dehydration.

The optional transilluminator provides light for venipuncture or pneumothorax/hydrocephalus detection. The BiliBlanket Plus transilluminator offers adjustable light intensity of up to 9000 lux of white light.

The BiliBlanket Plus High Output System effectively lowers the infant’s bilirubin while still allowing the infant to be swaddled, held and cared for by parents and hospital staff. The compact design of the BiliBlanket Plus reduces clutter in the nursery, and at just under 7 pounds it is conveniently portable for both hospital and home phototherapy treatment.

Features
- **Light Pad**
  Comfortable, flexible fibre-optic pad exposes a large area of the infant to high intensity phototherapy treatment.
- **Light Filters**
  Filter all but the 400 to 550 nm light which is most effective in treating hyperbilirubinaemia.
- **Control Switch**
  Infinitely variable intensity control allows complete control of therapeutic light to be administered.
- **Halogen Lamp**
  High intensity, tungsten halogen lamp with a built-in reflector produces a pad light intensity of up to 56 µw/cm²/nm on the highest setting.
- **Disposable Covers and Vests**
  - A disposable protective cover for the fibre-optic pad is required to reduce the risk of cross-contamination and enhance the patient’s comfort.
  - 10 soft disposable pad covers and 5 vests are included to secure the pad to the infant.
- **Safety Features**
  A cooling fan and safety thermostat protect the light source and the fibre-optic cable from overheating.
- **Air Filter Cleaning**
  Air filter is removable without tools for easy cleaning.
- **Easy Bulb Replacement**
  Bulb access door allows easy bulb replacement.
- **Hour Meter**
  Tracks the hours of therapeutic light delivered to the infant.
- **Optional Transilluminator**
  Offers up to 9000 lux of light for all transillumination needs.

Standard Features
- Fibre-optic inlet thermal protector
- Bulb replacement door
- Lint and dust filter
- One spare bulb
- Air flow failure signal
- Both main lines fused
- Internal voltage regulator
- One detachable power cord set
- One year warranty
Technical Specifications†

Environmental
- **Operating**:
  - Temperature: 15 to 35°C (59 to 95°F)
  - Humidity: 0 to 95% RH
  - Atmospheric Pressure: 500 hPa to 1060 hPa
- **Storage**:
  - Temperature: -5 to +50°C (23 to 122°F)
  - Humidity: 0 to 95% RH non-condensing
  - Atmospheric Pressure: 500 hPa to 1060 hPa

Performance
- **Light Band**: 400 to 550 nanometers; infrared and UV
  - **Width**: filtered with dichroic reflector and filters
  - **Irradiance**:
    - High setting: 45 ±11.25 µW/cm²/nm*
    - Low setting: 19 ±4.75 µW/cm²/nm*
    (*Light output is the average measurement of 6 points on the pad; ±25%)
- **Fan Noise**: Sound level less than 54 dBA measured at 1 meter with environmental sound level 10dBA below measured value
- **Mode of Operation**: Designed for continuous operation

Illuminator Bulb
- **Type**: 12 volt, 100 watt quartz halogen
- **Life**: 800 hours average at 25°C (77°F), at high intensity setting and continuous operation

Physical
- **Light Source**: Size: 10.5 x 4.5 x 11.0 in (26.7 x 11.4 x 27.9 cm) (W x H x L)
  - Weight: 7 pounds (3.2 kg)
- **Light Pad**: Overall pad size: 4.0 x 8.0 in (10.2 x 20.3 cm)
  - Illuminated area: 4.0 x 6.0 in (10.2 x 15.2 cm)
- **Fibre Optic Length**: 48 in ±2 in (122 cm ±5 cm)
  - Cable: At least 2400 optic fibres woven into a mat

Electrical
- **Input**: 2.2A at 100/120 volts AC
  - 1.1A at 220/230/240 volts AC
  - 100, 120, 220, 230, 240 volts AC, 50/60 Hz
  - Wattage: 200 watts maximum
- **Overheat Protection**: Thermal cutout switch near the lamp actuates at 110°C (230°F), cutting power to the lamp
- **Chassis Leakage Current**: Less than 300 microamperes at 100/120 volts AC
- **Chassis Ground Impedance**: Less than 0.1 ohm
- **Safety Standards**: Meets UL544, IEC 601-1, CSA222, IEC-601-1-2, CISPR 11 (Class A)

For more information, contact your Ohmeda Medical Sales Specialist or authorized agent.