

# Ohmeda Biliblanket Plus

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The new BiliBlanket Plus High Output pad, which can be identified by the gray cable, provides higher intensity levels than the original BiliBlanket Plus High Output pad with the white cable. Both pads can be used with the BiliBlanket Plus High Output or BiliBlanket Plus High Output light source box, however, the pad with the white cable will provide lower intensity levels.

The Ohmeda BiliBlanket Plus High Output Phototherapy System uses a fiber optic cable to deliver light from a high intensity lamp to a woven fiber optic pad. The pad is placed in a disposable cover that is in contact with the patient. The patient is exposed to light in the ideal 400 to 550 nanometer range for phototherapy treatment.

On units with the transilluminator option, unfiltered light in the visible spectrum travels through a flexible light pipe to appear at the tip of the transilluminator cable. The light from the cable is used to facilitate vascular sticks or injections. It is also used to find pneumothoraces.

The BiliBlanket Plus High Output Phototherapy system consists of a light source unit and a light pad with a four foot long fiber optic cable. The light source unit contains a lamp, light filters, a variable power supply for the light source, a cooling system and overheating protection near the lamp.

The light source lamp is a high intensity, tungsten halogen bulb with a built-in reflector. The reflector is coated with a dichroic surface which reduces the infrared energy transmitted. This bulb is specifically manufactured for use with the BiliBlanket Plus High Output.

A light filter, positioned in front of the lamp, rejects light outside the 400 to 550 nanometer range. This filter blocks nearly all ultra-violet and infrared light; only the blue light is allowed to pass. This filtered light is focused on the inlet of the fiber optic cable.

Light intensity may be selected by the front panel brightness rotary control. Control range is from  $19 \pm 4.75 \mu\text{W}/\text{cm}^2/\text{nm}$  at full counter clockwise to  $45 \pm 11.25$

$\mu\text{W}/\text{cm}^2/\text{nm}$  at full clockwise with a medium detent at  $32 \pm 8 \mu\text{W}/\text{cm}^2/\text{nm}$ . See Light Output Measurement Procedures in Section 4 for precise light output measurement.

## **Mode select**

Selects the operating mode: phototherapy or transillumination. Using the Ohmeda transilluminator light pipe, the BiliBlanket Plus High Output System can be used as a transilluminator.

## **Supply power**

Power for the light source unit can be supplied by any standard AC mains power source at either 50 or 60 Hz that have voltages in the range: 90 - 132 or 180 - 264. Power enters the light source through a receptacle that has an integral power switch.

## **Cooling**

A fan cools the light source unit. A thermal cutout switch located next to the light-filter protects the light source unit and fiber optic cable or transilluminator from overheating.

## **Fiber optic cable**

The fiber optic cable contains 2400 individual plastic fibers which transmit the light from the light source to the light pad. The light pad is constructed by weaving these fibers into a mat. This patented process produces a pad with light over the entire surface. These fibers are randomized in the cable to eliminate any local intensity gradients due to bulb hot spots, dust on the filter, dust on the cable end, etc. This allows the nearly uniform, continuous blanket of light. A disposable protective pad cover is provided to reduce the risk of cross-contamination and make the patient more comfortable.

## **Disposable cover**

The disposable cover is designed for use with both premature and full-term infants. The infant lies directly on the disposable-covered pad without any method of attachment between the pad and the infant.

## **Disposable vest**

A disposable vest is designed to secure the fiber optic pad to the infant. With the disposable vest, it is possible to hold and nurse the infant while continuing phototherapy treatment. The disposable cover should be used for premature infants and fullterm infants who can't tolerate having the vest secured around the midsection.

## **Transilluminator**

The transilluminator light pipe contains plastic fibers which transmit light from the light source to the tip.

[Get the User Manual Here](#)