

# Neonatal Patient Warming Systems



A newborn baby can have difficulty protecting its' core body temperature as their bodies and internal organs are not yet fully developed. Neonates and especially premature babies must be well warmed up to protect their core body temperature and avoid hypothermia after birth.

#### **OUR NEONATAL PATIENT WARMING TECHNOLOGY**

Our neonatal patient warming systems use state of the art technology and the latest developments in **carbon fiber materials** and microprocessors to avoid hypothermia in **neonatal intensive care departments** and **maternity wards**. Our neonate warming systems effectively provide a warm and comfortable environment by stabilizing or raising the peripheral temperature of the neonate patient who carries the risk of hypothermia. Our technology is also X-RAY translucent and can be used throughout operations where X-RAYs are used



#### COMFORTABLE, SAFE AND EASY TO USE

Our neonatal products include; swaddling blankets, and neonatal mattresses. All our systems operate on low voltage requirements (24 Volts DC – 24 Volts AC) which is cost efficient and technically safe for neonatal patients and operators. Our mattresses and blankets can reach the desired temperature within **5-7 minutes**. Swaddling blankets provide a comfortable and safe warming environment for the baby through a sensitive sensor system wrapping the baby's whole body.

Swaddling blanket models can be used during external hospital transfers together with incubators as well as radiant warmers and open neonatal beds to provide better warming especially during cold weathers. Blankets can be used for swaddling or open under the neonatal patients as required.

Our neonatal transport models can also be used during internal hospital transfers and in ambulances. They provide great comfort and convenience while the babies are transported from the delivery room to the maternity ward. During cold weathers, our swaddling blankets provide a warmer and healthier atmosphere when used in combination with transport incubators as it may take a while for the transport incubator to reach the target temperature and maintain that temperature level for longer periods of time. They are also suitable for usage during incubator disinfections when the baby is taken out of the incubators for cleaning and disinfection purposes.

Our transport models can run **on their batteries for 4-5 hours** without requiring a constant power connection. They are also recharged back to their full capacity in around 4 hrs. All our neonatal mattresses and blankets are covered with light, soft and healthy PU (Polyurethane) which is completely sealed and water proofed against all liquids. They are also very easy to clean and disinfect. We also offer a wide range of **disposable and reusable cover options**.

Medwarm neonatal patient warming systems are installed with a DUAL SAFETY feature. Each system is controlled by two separate micro processors; one available in the control unit and the other on the mattress/blanket card. Our advanced alarm system warns operators when required and includes functions such as a silent button to silence the alarm and continue with the set temperature func-

tions.

## Our Advantages

- Short Warming Times
- Transport Option with Battery
- **4** High Level Safety
- **₹ Comfortable & Easy to Use**
- Easy to Clean
- Silent & Lightweight
- Monitoring Body Temperature
- Affordable Prices









#### **TECHNICAL SPECIFICATIONS**

**POWER** 

Control Units: Power Input: 220 V AC - 110 V AC 50 HZ / 60 HZ

W-500D : 350 Watt 24 Volt AC W-150T(Large) : 300 Watt 24 Volt DC W-300 : 350 Watt 24 Volt AC W-150T(Small) : 90 Watt 24 Volt DC W-150 : 150 Watt 24 Volt DC

TEMPERATURE OUTPUT RANGE

30° C to 39° C (90° F to 104° F) in steps of 0.1° C. High Temperature Safety Cut Off Point at 41° C (109° F)

ТҮРЕ	SIZE	WEIGHT	DESCRIPTION
Control Units:			
W-500D W-300 W-150T (Large) W-150T(Small) Warming Mattresses:	187x282x87 mm 187x282x87 mm 187x282x87 mm 187x168x87 mm	5,8 kg 5,5 kg 4,4 kg 2,3 kg	Dual Channel Single Channel With Battery With Battery
IM-60MS IM-55M	60x35x2 cm 55x30x1 cm	0,76 kg 0,62 kg	Neonatal Neonatal
Blankets:			
IM-65BK IM-55BK	65x70 cm 55x50 cm	1 kg 0,68 kg	Neonatal Neonatal

Extension Cable Length: 2,5 mt Pad Cable Length: 1 mt

#### ΔΙΔΡΜΩ

Power Alarm: Activated if power is cut off or if the power cord is disconnected when the unit is turned on

Pad Alarm: Activated when the connection between the controller and the mattress is cut off.

System Alarm: Activated in case of a technical problem.

High Temperature Alarm: High temperature alarm is sounded once the temperature goes over the system

limit of 42°C

*High Deviation Alarm:* If the temperature goes +1,5°C over the set temperature, high deviation alarm is sounded.

#### COMPLIANCE

EN60601-1 Type BF

EN60601-1-2 Electrical Safety Requirements for medical devices

93/42/EEC Medical Device Directive, Class IIb

2006/95/EC LVD Low-voltage Directive

2004/108/EC EMC Electromagnetic Compatibility

EN 14971 Medical Devices- Application of risk management

EN 980 Symbols used for labelling of Medical Devices

EN 80601-2-35 Requirements for the basic safety and essential performance of Heating Devices

### ENVIRONMENTAL

Ambient Temperature (Operating)  $15^{\circ}$  C -  $40^{\circ}$  C Ambient Temperature (Storage)  $-10^{\circ}$  C -  $55^{\circ}$  C Relative Humidity  $30^{\circ}$  Relative Humidity  $30^{\circ}$ 





İSTANBUL MEDİKAL LTD.ŞTİ. Eğitim Mah. Şirin Yuva Sokak No:3 Kat:1 D:1 34722 Kadıköy — İstanbul T: +90 (216) 336 27 64 - F: +90 (216) 336 27 09 www.istanbulmedical.com info@istanbulmedical.com