## 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-300: 350 Watt 24 Volt AC
  - W-150: 150 Watt 24 Volt DC
  - W-150T(Large): 270 Watt 24 Volt DC (for Adult patient)
  - W-150T(Small): 90 Watt 12 Volt DC (for Neonate patient)

**TEMPERATURE OUTPUT RANGE**
- 30°C to 40°C (86°F to 104°F) in steps of 0.1°C (Temperature settings up to 42°C can be adjusted upon request. High Temperature Safety Cut Off Point at 42°C (109°F) as standard)

<table>
<thead>
<tr>
<th>TYPE</th>
<th>SIZE</th>
<th>WEIGHT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Units:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W-500D</td>
<td>187x282x87 mm</td>
<td>5.5 kg</td>
<td>Dual Channel</td>
</tr>
<tr>
<td>W-300</td>
<td>187x282x87 mm</td>
<td>5.6 kg</td>
<td>Single Channel</td>
</tr>
<tr>
<td>W-150</td>
<td>72x104x26 mm</td>
<td>0.8 kg</td>
<td>With Adapter</td>
</tr>
<tr>
<td>W-150T (Large)</td>
<td>187x282x87 mm</td>
<td>4.25 kg</td>
<td>With Battery</td>
</tr>
<tr>
<td>W-150T (Small)</td>
<td>187x168x87 mm</td>
<td>2 kg</td>
<td>With Battery</td>
</tr>
</tbody>
</table>

- **Warming Mattresses:**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>SIZE</th>
<th>WEIGHT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM-190M5S</td>
<td>190x50x10 cm (with foam)</td>
<td>4 kg</td>
<td>Large bariatric size</td>
</tr>
<tr>
<td>IM-190M5S</td>
<td>190x50x3 cm (with foam)</td>
<td>3.3 kg</td>
<td>Large size</td>
</tr>
<tr>
<td>IM-150M5S</td>
<td>150x50x3 cm (with foam)</td>
<td>2.25 kg</td>
<td>Medium size</td>
</tr>
<tr>
<td>IM-80M5S</td>
<td>80x50x3 cm (with foam)</td>
<td>1.9 kg</td>
<td>Small size</td>
</tr>
<tr>
<td>IM-190M</td>
<td>190x50 cm</td>
<td>2.75 kg</td>
<td>Large size</td>
</tr>
<tr>
<td>IM-150M</td>
<td>150x50 cm</td>
<td>1.9 kg</td>
<td>Medium size</td>
</tr>
<tr>
<td>IM-120M</td>
<td>120x50 cm</td>
<td>1.75 kg</td>
<td>Medium size</td>
</tr>
<tr>
<td>IM-80M</td>
<td>80x50 cm</td>
<td>1.25 kg</td>
<td>Small size</td>
</tr>
</tbody>
</table>

- **Blankets:**

<table>
<thead>
<tr>
<th>TYPE</th>
<th>SIZE</th>
<th>WEIGHT</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>IM-190B</td>
<td>190x100 cm</td>
<td>2.3 kg</td>
<td>Large size</td>
</tr>
<tr>
<td>IM-180BAS</td>
<td>180x45 cm</td>
<td>1.1 kg</td>
<td>Arm-Shoulder warming</td>
</tr>
<tr>
<td>IM-150BAS</td>
<td>150x45 cm</td>
<td>0.85 kg</td>
<td>Arm-Shoulder warming</td>
</tr>
<tr>
<td>IM-180B</td>
<td>180x80 cm</td>
<td>2.0 kg</td>
<td>Large size</td>
</tr>
<tr>
<td>IM-150B</td>
<td>150x80 cm</td>
<td>1.6 kg</td>
<td>Medium size</td>
</tr>
<tr>
<td>IM-120B</td>
<td>120x80 cm</td>
<td>1.1 kg</td>
<td>Medium size</td>
</tr>
<tr>
<td>IM-85DB</td>
<td>85x55 cm (x2)</td>
<td>1.4 kg</td>
<td>Small size</td>
</tr>
<tr>
<td>IM-80B</td>
<td>80x70 cm</td>
<td>0.75 kg</td>
<td>Small size</td>
</tr>
</tbody>
</table>

- **Extension Cable Length:** 2 m  
- **Pad Cable Length:** 1 m

**ALARMS**
- 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.
- In-Op Alarm: Activated in case of a technical problem.
- **High Temperature Alarm:** For Adults and Pediatrics, 42°C is the highest temperature. When the measured temperature reaches this value, the device outputs audible and visual alarms.
- **High/Low Deviation:** If the temperature goes +1.5°C over the set temperature, high deviation alarm is sounded.

**COMPULSORY**
- EN60601-1: Type BF
- EN60601-1-2: Electromagnetic Safety Requirements for medical devices
- 93/42/EC Medical Device Directive, Class Ib
- 2006/95/EC (LVD): Low-voltage Directive
- 2004/108/EC: EMC Electromagnetic Compatibility
- EN 1491 Medical Devices: Application of risk management
- EN 806:02.3:5 Requirements for the basic safety and essential performance of Heating Devices

**ENVIRONMENTAL**
- Ambient Temperature (Operating): 15°C - 40°C

**For Better Clinical Care**
- NEW
- 100mm thick
- bariatric mattress

Contact us on: 01663-735494  
Email: info@qedscientific.com
Why Should You Choose

Patient Warming Systems?

OUR PATIENT WARMING TECHNOLOGY:

Our patient warming systems use state of the art technology and the latest developments in carbon fibre materials and microprocessors to avoid hypothermia in operation rooms, neonatal intensive care departments, maternity wards as well as orthopaedic departments and ambulances through stabilizing or raising the peripheral temperature of the patient carrying the risk of hypothermia effectively to provide a warm and comfortable environment.

Our efficient, professional and safe carbon fibre technology is also X-Ray translucent and can be used throughout operations where X-Rays are used.

- ADULT & PEDIATRIC PATIENT WARMING SYSTEMS
- NEONATAL PATIENT WARMING SYSTEMS
- TRANSPORT PATIENT WARMING SYSTEMS WITH BATTERY

A range of adult warming mattresses can be used stand-alone or in conjunction with a heated blanket. Mattresses are available in four different sizes with each size available with or without memory foam and filling for pressure relief:

- Rugged construction for long life
- With or without pressure relief foam
- Uniform heating across the surface
- Heavy duty plug for safety
- Welded seams - waterproof
- Use on its own or with a blanket

W-300 mattress controller

Mattress and blanket with W-500D two channel controller unit

THE BEST HEATING PERFORMANCE: Our mattresses and blankets can reach 37°C within 5-7 minutes giving us a great advantage over competing products available in the market as well as providing the clinical personnel flexibility and ease of use during operation. The ability to set and manage the target warming temperature within 0.1°C increments also allows for additional sensitivity (e.g. 36.8°C, 37.3°C, 38.0°C etc.)

COMPATIBLE AND EASY TO USE: Through the visco-elastic foam used inside the warming mattresses, we prevent decubitus ulcers which may occur on patients with prolonged stay during operations or recovery. Soft and lightweight blankets can easily cover the patient and provide a comfortable warming experience. Carbon fiber material used as the heating element in our mattresses and blankets allows for complete homogeneous warming. Our systems work silently with digital LCD displays to adjust/extend set and measured temperature values. All these features provide a high level of functionality and ease of use for the clinical personnel.

EASY TO CLEAN: All our products are completely sealed and waterproofed against all liquids. They are also easily cleanable. We offer a wide range of disposable and reusable covers which are made from light, soft and healthy PU (Polyurethane). Polyurethane is permeable to air and vapor and provides protection against all liquids.

TRANSPORT OPTION WITH BATTERY: Our transport systems can provide warming without requiring a constant power connection on its own battery for around 3-4 hours. This unique feature makes our product one of its kind in the market by playing an important role in saving lives of many injured patients with its ability to provide warming during patient transfers across hospitals or other long distances. Our transport warming mattresses and blankets provide the ability to warm patients on the spot during hospital transfers or at the site of various accidents on the land or even in the sea by keeping the patients peripheral temperature and avoiding hypothermia and additional complications that come with it.

ENVIRONMENT FRIENDLY: All our systems operate on low voltage requirements (12 Volts DC – 24 Volts AC) which is cost efficient and technically safe for patients and operators. As our systems are reusable, the disposable emissions are kept at a minimal level hence protecting the environment.

WIDE VARIETY OF PRODUCTS: All our mattresses and blankets are available in a wide variety of sizes and dimensions for adults, pediatric patients and neonates to answer all our clients’ clinical and personal needs and requirements. Additional accessories such as control panel, wall hanging unit, IV support bracket and extension cables at various lengths provide extensive flexibility to clinical personnel during operation.

ABILITY TO MONITOR PATIENT’S BODY TEMPERATURE: Medwarm patient warming systems also provide the option to measure and monitor the patient’s body temperature during warming.

AFFORDABLE PRICES: All our products are very well priced and extremely affordable in comparison to other products available in the market.

IM-190 MS
1900 x 500 x 40 mm with foam
IM-150 MS
1900 x 500 x 50 mm with foam
IM-120 MS
1200 x 500 x 40 mm with foam
IM-80 MS
800 x 500 x 40 mm with foam

Bariatric Mattress:
IM-190 MS
1900 x 500 x 100 mm with foam

IM-190W without foam
IM-150W without foam
IM-120W without foam
IM-80W without foam

ADVANTAGES OF OUR PATIENT WARMING SYSTEMS

IMPORTANCE OF PATIENT WARMING

Hypothermia is a condition in which the body’s core temperature of 37°C drops below the required temperature of 35.5°C for normal metabolism and body functions. The primary causes of perioperative hypothermia include: administration of anesthetic drugs and liquids, enduring cold temperatures maintained in operating rooms for extended periods of time and the biological inability of neonates and elderly patients protecting their core body temperature under these conditions.

Perioperative hypothermia is associated with a number of adverse outcomes such as: wound infections, cardiac disturbance as well as delayed emergence from anesthesia and increased mortality rates due to all outlined above causes.

The good news is that preventing hypothermia can be simple, effective and affordable with MedWarm Patient Warming Systems. With a wide range of mattresses and blankets at various sizes and dimensions, MedWarm Patient Warming Systems provide a high number of benefits both to patient and clinical personnel in their fight against hypothermia. According to clinical research, maintaining a normal body temperature (normothermia) has been shown to reduce the risk of complications and costs associated with unintended hypothermia by reducing the rate of post-operative wound infections, decreased likelihood of post-operative myocardial infarction, shortened hospital length of stay and lower mortality rates.

High Level Safety: Medwarm 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. These two micro processors control the heating system independently. This way, even in the remote possibility that one of the micro processors fail, the other micro processor would act as fail-safe and protect the whole system from any kind of overheating. The maximum target temperature is set at 42°C and the heating process is cut off automatically once the real temperature reaches this level. Each mattress and blanket contains up to 8-9 sensors which measure the real temperature at all times on the mattress/blanket and provide a completely safe temperature management system for all our products. Our portable test devices also provide extensive troubleshooting and testing abilities for our distributors and technical service personnel.