

# PetTherm

## Veterinary Warming Systems

Innovative technology for optimum veterinary care

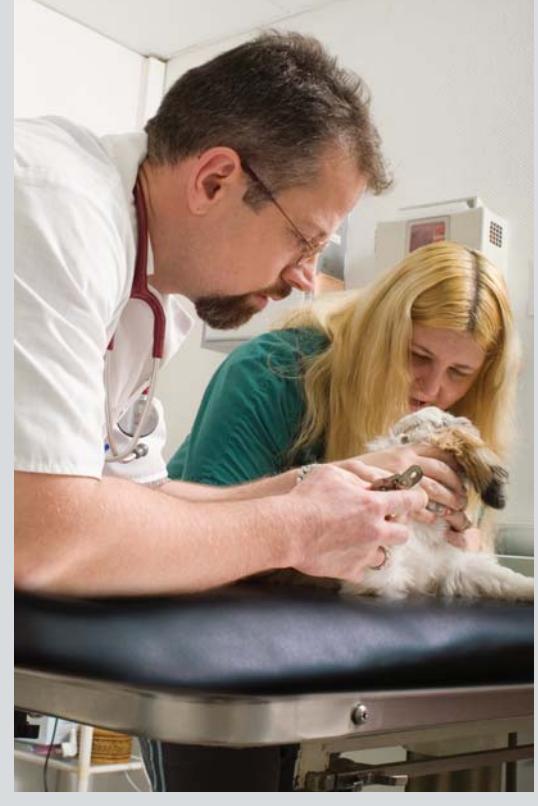


# PetTherm

Inditherm have established themselves as experts in heating and warming solutions for a wide range of industries and applications. Their innovative, patented technology has been leading warming practice in medical applications and is now adapted for the veterinary environment.

Like humans, the thermoregulatory system of animals is affected from the onset of anaesthesia, which increases the possibility of hypothermia during surgical procedures. The risk of hypothermia in anaesthetised animals is well documented<sup>1,2</sup>. Although mild reductions in body temperature are generally well tolerated in animals, under anaesthesia hypothermia may potentially affect the animal's cardiovascular, respiratory, gastrointestinal, metabolic and central nervous systems<sup>2</sup>.

PetTherm is an effective warming system that can be used to warm veterinary patients before surgery, during the surgical intervention, and in recovery. This minimises loss of body heat, reducing wound infections, complications and recovery times, and increasing survival rates.

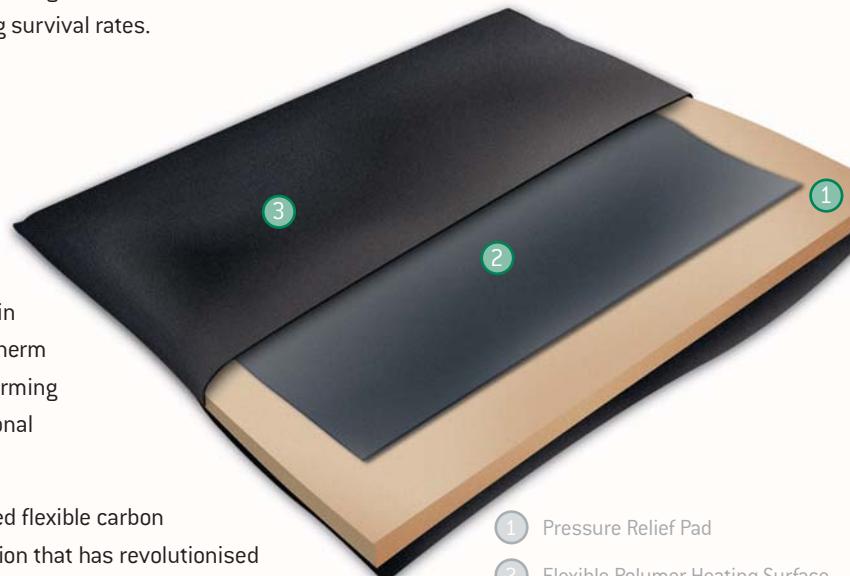


## Warming Technology

A range of technologies have been used for warming animals during surgery over the years. Most, if not all, of these have their shortcomings in terms of performance, convenience or cost. Inditherm have developed the very latest technology for warming and produced a system that out-performs traditional methods in all respects.

The PetTherm system utilises Inditherm's patented flexible carbon polymer technology, which is an innovative solution that has revolutionised clinical practice for warming humans and animals alike. The systems combine more effective thermal transfer with simplicity of use, making them superior to other techniques currently available.

The Inditherm polymer gives a large, uniform warming surface, whilst the in-built pressure relief also helps provide a large contact area with the animal. With the same running cost as a light-bulb and completely effective warming from under the patient, it is practical and affordable to use the system on all cases.



- 1 Pressure Relief Pad
- 2 Flexible Polymer Heating Surface
- 3 Sealed Outer Cover

## Features and Benefits

Inditherm Medical have used their carbon polymer technology to produce a veterinary warming system that is practical, convenient and highly effective. Key features & benefits include:

### Exceptional performance

- Uses latest patented technology
- High thermal transfer characteristics
- Better performance than traditional warming methods

### Practical and convenient

- Simple to use
- Easy to clean
- No water - no leaks
- Unhindered access to the patient
- X-ray translucent
- Unobtrusive, lightweight and silent

### Clinical Benefits

- Helps calm the conscious animal
- Pressure relief built in, under the heating surface
- Less complications, better outcomes, and quicker recovery

### Safe and Robust

- Low voltage operation
- Durable, fully sealed cover
- No water or circulating air
- Independent thermal safety cut-out
- Meets rigorous medical device standards

## Clinical Benefits and Convenience

Research has shown that anaesthesia rapidly induces hypothermia, which in turn leads to increased complications such as wound infections, longer recovery times and higher mortality<sup>2,3</sup>. Experience has also shown that PetTherm has the effect of calming animals pre-operatively, making them easier to handle and prepare for surgery.



When using PetTherm there is nothing obstructing the surgical field or access to the patient. The system is lightweight, for ease of handling, and has no circulating warm air or water. The temperature is easily adjusted over a wide range using the compact, unobtrusive control unit.

## Product Range

PetTherm mattresses come in a range of sizes to suit different applications. They are available with retaining straps to secure around the operating table rail, or without if used loose, for example in the recovery room. Products can be customised to meet individual requirements, on request.

The Control Unit is compact and light-weight, with an integral clamp for pole mounting. Operation is simple, with a wide range of temperature settings, and is completely silent. The units are fully interchangeable and can be used with any mattress.



## Applications

The PetTherm system is designed specifically for performance in the veterinary environment. The design and method of operation make it more easily tolerated by the conscious animal, so it is particularly suited for the pre- and post-operative periods. The robust, fully sealed outer cover is ideal for use in the surgical setting.

PetTherm can be adapted for a broad range of veterinary patients - small, large, common or exotic alike. It provides a simple, effective and affordable solution for all your warming needs.

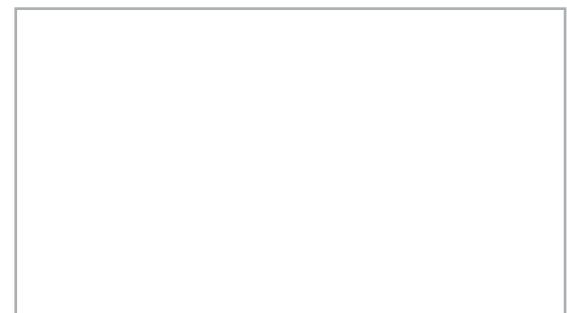
# Technical Specifications

Mattress Construction:					
Inditherm® flexible polymer heating sheet, with 18mm viscoelastic foam pressure relief pad under and 205g.m <sup>2</sup> expanded polyester comfort lining over.					
Encapsulated in durable, latex-free nylon fabric cover, with non-microporous polyurethane coating.					
In-built temperature sensor and over-temperature thermal cut-out.					
Connection cable, 20cm long, with strain relief, fully sealed entry grommet and IP61 rated waterproof connector.					
Sensors and cables let into pressure relief pad for patient comfort.					
Temperature Range:					
User-selected ranges within the band 28°C to 41°C (82°F to 106°F) in steps of 1°C (2°F) Over-temperature safety cut-out at 43°C (109°)					
Power:					
<b>Control Unit:</b>	230 Vac or 110Vac or 100Vac (±6%), 50Hz/ 60Hz 75 W				
<b>Mattresses:</b>	24 Vac (nom.), 50Hz 25 W to 65 W, depending on size				
Dimensions:					
Part:	Size:	Weight:			
<b>Control Unit:</b>	VCU1	160 x 240 x 230 mm			
<b>Mattresses:</b>	VTM1	1300 x 585 mm			
	VTM2	710 x 535 mm			
	VTM3	1070 x 535 mm			
	VTM1-S	1300 x 585 mm			
	VTM2-S	710 x 535 mm			
	VTM3-S	1070 x 535 mm			
Other dimensions available on request					
<b>Cable Length:</b>	4m				
Compliance:					
EN60601-1, Class IIa, Type BF					
EN60601-1-2					
EN60601-2-35					
93/42/EEC, EEC Medical Devices Directive					
73/23/EEC, EEC Low Voltage Devices Directive					
Environmental :					
<b>Ambient Temperature (Operating):</b>	15°C to 40°C (59°F to 104°F)				
<b>Ambient Temperature (Storage):</b>	-10°C to 55°C (14°F to 131°F)				
<b>Relative Humidity:</b>	30% to 70%				

Due to continuous product development the company reserves the right to change these details without notice.  
This system is designed specifically for veterinary use and is thus not approved for any other application.

## References

1. **Accidental hypothermia during anaesthesia in dogs and cats.**  
Waterman, A. Vet. Rec. 1975 Apr 5; 96(14):308-13
2. **Perioperative hypothermia management in dogs and cats.**  
Ko , J. DVM News Magazine. 2001 Oct.
3. **Prevention of hypothermia in cats during routine oral hygiene procedures**  
Hale, F.A. and Anthony, J.M.G. Can. Vet. J. 1977 May; Vol 38:297-299



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