

Technical Specification for Small Animal Ventilator with Homeothermic Blanket

- The system should be suitable for mice, rats and guinea pigs and other animals weighing 10g-1kg.
- Input power range should be 100 ~ 240V, 50 /60Hz, 24V, 40W, 1.67A adapter DC power supply, safe and effective;
- It should provide safe and effective intermittent positive pressure ventilation (IPPV).
- Both volume and pressure modes should be available.
- Sound, intelligent text, error code and other fault alarm alerts;
- The system should have small size, compact layout and flexible operation.
- It should have 7 inches LCD touch screen with wide-angle visual.
- It should have the feature to display the pressure-time graph in real time in volume and pressure modes.
- It should have the ability to store and called 10 groups of different respiratory making it convenient and efficient.
- The breathing frequency should be able to be switched between 10 ~ 300bpm.
- Tidal volume range should be 0.05ml ~ 5ml.
- Airway pressure range should be 1~50cm H₂O with the accuracy range of ± 0.7 cm H₂O; positive end; expiratory pressure (PEEP) range is 0~10cm H₂O.
- There should be provision to set the respiratory parameters such as PIP/PEEP/Sigh/INSP.Hold/EXP.Hold
- After submitting the animal weight and the device should automatically set the reference breathing parameters.
- The adjustable range of I:E ratio should be from 20% to 80%; the sigh should increase the tidal volume from 0 to 20%, and should set auto-sigh once after every 10 to 999 breaths or manual control.

Homeothermic Blanket should have

- 3-inch color LCD touch screen, beautiful appearance, lightweight, easy to operate
- Real-time display of measuring temperature, setting temperature, heating state, running state, fault warning and other functions
- Real-time monitoring of heating pad and probe temperature, with circuit control to achieve dual safety protection
- Double channel display interface, which can keep two animals warm at the same time and operate **independently**
- Display the working **status progress bar** of heating pad in real time, and monitor the working status of **channel: IDLE, WARNING, STANDBY and WORKING**
- **Fast temperature rise, high temperature control precision, set range of 20-45°C, resolution of 0.1°C, and can switch between Celsius and Fahrenheit**
- **Various alarm information can be set, such as high and low limit temperature ($\pm 1^\circ\text{C}$), maximum temperature (50°C), probe, heating pad, sound and indicator light can be freely opened and closed, and can choose one-button operation.**

- High sensitivity temperature probe, diameter 1.5mm, rod length 30mm, line length 150cm
- Silica gel heating pad, high temperature resistant, easy to clean, with 3 different sizes and specifications of heating pad, suitable for different experimental platforms;
- Power supply: 100-240 V, 50/60 Hz
- Control unit size: L205 x W148 x H80 mm
- Weight of control unit: 1.3kg