

## Chapter 8: Specifications

| Parameter                         | ReeVue Specification   |
|-----------------------------------|--|
| <b>Power Requirements</b>         | External 12-volt power supply from device, less than 1.5 Amps. |
| <b>Barometric Pressure Sensor</b> |  |
| Accuracy                          | $\pm 2$ mmHg   |
| Resolution                        | 1 mmHg   |
| Min/Max Range                     | 525 to 795 mmHg  |
| <b>Temperature Sensor</b>         |  |
| Accuracy                          | $\pm 1$ °C   |
| Resolution                        | 0.1 °C   |
| Min/Max Range                     | 10 to 40 °C  |
| <b>Relative Humidity Sensor</b>   |  |
| Accuracy                          | $\pm 10$ %RH   |
| Resolution                        | 1 %RH  |
| Min/Max Range                     | 10 to 95 %RH Non-Condensing                                    |
| <b>Oxygen Sensor</b>              |  |
| Type                              | Galvanic Fuel Cell   |
| Accuracy                          | $\pm 0.2$ %O <sub>2</sub>                                      |
| Resolution                        | 0.01 %O <sub>2</sub>   |
| Min/Max Range                     | 0 to 30 %O <sub>2</sub>  |
| Nominal Sensor Life               | > 30 months  |
| <b>Air Flow Sensor</b>            |  |
| Type                              | Fixed-orifice Differential Pressure Pneumotach                 |
| Accuracy                          | $\pm 2\%$ of reading   |
| Resolution                        | 10 ml / sec<br>(0.01 LPM)                                      |
| Min/Max Range                     | - 40 to 150 LPM<br>(-600 to 2500 ml / sec)                     |
| Breathing Rate                    | 5 to 40 breaths/min  |

| Parameter                             | ReeVue Specification                 |
|---------------------------------------|--------------------------------------|
| Tidal Volume                          | 200 to 3000 ml                       |
| <b>Oxygen Consumption Calculation</b> |                                      |
| Range                                 | < 70 to > 720 ml /min O <sub>2</sub> |
| Resolution                            | 1 ml/min O <sub>2</sub>              |
| <b>Metabolic Rate Calculation</b>     |                                      |
| Calculation Method                    | Weir Equation with assumed RQ = 0.83 |
| Range                                 | 500 to > 5,000 kcal/day              |
| Resolution                            | 7 kcal/day                           |
| Measurement Time                      | 10 minutes                           |
| <b>Physical Dimensions</b>            |                                      |
| Size                                  | 20 x 30 x 10 cm                      |
| Weight                                | 5.75 lbs. (2.6 kg)                   |
| <b>Measurement Conditions</b>         |                                      |
| Temperature Range                     | 15 to 30 °C<br>(59 to 86 °F)         |
| Barometric Pressure Range             | 525 to 795 mmHg                      |
| Relative Humidity Range               | 10 to 88% RH<br>non-condensing       |
| <b>Storage Conditions</b>             |                                      |
| Temperature Range                     | -20 to 60 °C<br>(-4 to 140 °F)       |
| Barometric Pressure Range             | 375 to 795 mmHg                      |
| Relative Humidity Range               | 10 to 95 % RH<br>non-condensing      |