PLASMA BIONICS

V10 AIR PLASMA STERILIZER
Redefining Veterinary Instrument Sterilization

DATA SHEET

plasmabionics.com
## TECHNICAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exterior dimensions</td>
<td>28.75 in x 19.25 in x 18.75 in (73 cm x 49 cm x 48 cm)</td>
</tr>
<tr>
<td>Installation space requirement</td>
<td>30.75 in x 21.25 in x 20.75 in (2 inches on all sides)</td>
</tr>
<tr>
<td>Sterilization chamber dimensions¹</td>
<td>18 in x 16 in x 7 in (46 cm x 41 cm x 18 cm)</td>
</tr>
<tr>
<td>Sterilization chamber volume¹</td>
<td>33 L (8.7 gal)</td>
</tr>
<tr>
<td>Sterilization tray dimensions¹</td>
<td>16 in x 10 in x 4 in (41 cm x 25 cm x 10 cm)</td>
</tr>
<tr>
<td>Sterilization tray volume¹</td>
<td>10.5 L (2.8 gal)</td>
</tr>
<tr>
<td>Weight</td>
<td>110 lbs (49.9 kg)</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>0-40 °C (32-104 °F)</td>
</tr>
<tr>
<td>Storage temperature</td>
<td>-25-60 °C (-13-140 °F)</td>
</tr>
<tr>
<td>Electrical requirements</td>
<td>110-120 VAC single phase, 50/60Hz, 6.5 A max</td>
</tr>
</tbody>
</table>

¹ Instruments being sterilized must fit within the area of the sterilization tray.

## STERILIZATION CYCLE SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of sterilization cycle</td>
<td>Single cycle sterilizes most general surgical and laparoscopic instruments*</td>
</tr>
<tr>
<td>Sterilization process</td>
<td>Air Plasma Sterilization™ process, terminal sterilization using overkill method to provide SAL of 10⁻⁶</td>
</tr>
<tr>
<td>Total sterilization cycle time</td>
<td>Approximately 4 hours</td>
</tr>
<tr>
<td>Preconditioning time</td>
<td>15-20 min¹</td>
</tr>
<tr>
<td>Sterilizing time</td>
<td>3 hours</td>
</tr>
<tr>
<td>Ventilating time</td>
<td>45 minutes</td>
</tr>
<tr>
<td>Sterilant</td>
<td>Reactive oxygen and nitrogen species, primarily ozone, nitrogen dioxide, and hydroxyl radicals</td>
</tr>
<tr>
<td>Sterilant production</td>
<td>Sterilant gases produced from preconditioned air along the surface of the plasma sheet</td>
</tr>
<tr>
<td>Sterilant delivery</td>
<td>Sterilant gases are produced inside the sterilization chamber</td>
</tr>
<tr>
<td>Sterilant removal</td>
<td>Sterilant gases are pumped through Carulite® 200 granular catalyst, converted back into air, and pumped back into the sterilization chamber</td>
</tr>
<tr>
<td>Critical process parameters</td>
<td>Air temperature, pressure, and humidity are monitored and conditioned during the preconditioning step, voltage feedback from plasma production is monitored throughout the sterilizing step</td>
</tr>
<tr>
<td>Sterility assurance</td>
<td>Biological indicators (≥10⁶ spores of Geobacillus stearothermophilus)</td>
</tr>
</tbody>
</table>

*see lumen claims below and separate material compatibility lists

¹Preconditioning time may vary based on environmental conditions (i.e. relative humidity, temperature, altitude)
### CONSUMABLES

<table>
<thead>
<tr>
<th>Consumable</th>
<th>Usable life (sterilization cycles)</th>
<th>Disposal</th>
<th>Shelf life</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plasma sheet</td>
<td>15</td>
<td>No restrictions</td>
<td>Indefinite</td>
<td>Away from heat and moisture</td>
</tr>
<tr>
<td>Desiccant canister</td>
<td>50-75</td>
<td>No restrictions</td>
<td>Indefinite</td>
<td>Away from heat and moisture</td>
</tr>
<tr>
<td>Catalyst canister</td>
<td>200</td>
<td>No restrictions</td>
<td>Indefinite</td>
<td>Away from heat and moisture</td>
</tr>
<tr>
<td>Chemical indicator tape</td>
<td>N/A</td>
<td>No restrictions</td>
<td>Indefinite</td>
<td>Away from heat, moisture, and oxidative gases</td>
</tr>
</tbody>
</table>

1Plasma sheets can be returned to Plasma Bionics LLC for recycling
2Indefinite shelf life in original packaging

### NETWORKING AND DATA RECORDING

| Data recording                | Electronic data storage up to 10,000 cycles, USB data retrieval for record keeping |
| Network connectivity          | No network connectivity feature on model V10                                    |

### ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Product Code</th>
<th>Product Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>V101</td>
<td>V10 Air Plasma Sterilizer</td>
</tr>
<tr>
<td>S201</td>
<td>Plasma sheets (5 pack)</td>
</tr>
<tr>
<td>D501</td>
<td>Desiccant cannister</td>
</tr>
<tr>
<td>C601</td>
<td>Catalyst cannister</td>
</tr>
<tr>
<td>CI301</td>
<td>Chemical indicator tape (3 pack)</td>
</tr>
</tbody>
</table>

### LUMEN CLAIMS

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mm</td>
<td>≤100 mm</td>
</tr>
<tr>
<td>2 mm</td>
<td>≤200 mm</td>
</tr>
<tr>
<td>3 mm</td>
<td>≤300 mm</td>
</tr>
<tr>
<td>4 mm</td>
<td>≤400 mm</td>
</tr>
<tr>
<td>≥6 mm</td>
<td>≤600 mm</td>
</tr>
</tbody>
</table>